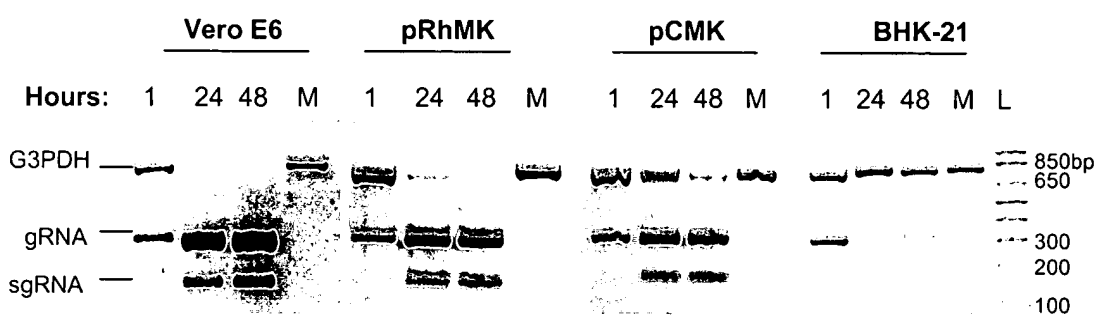


FIG. 1

A.



B.

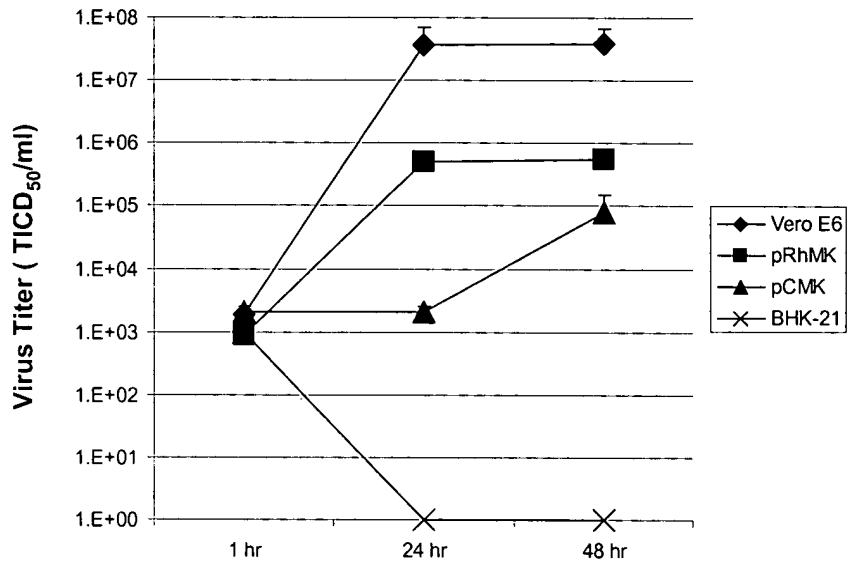


FIG. 2.

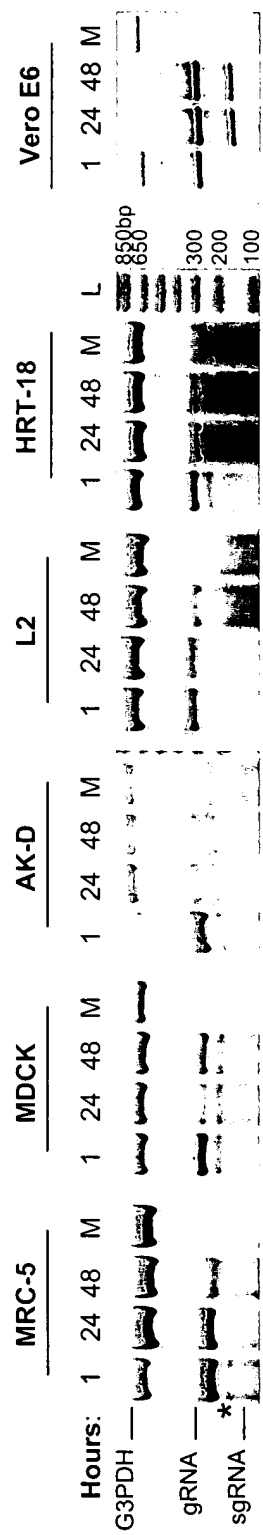
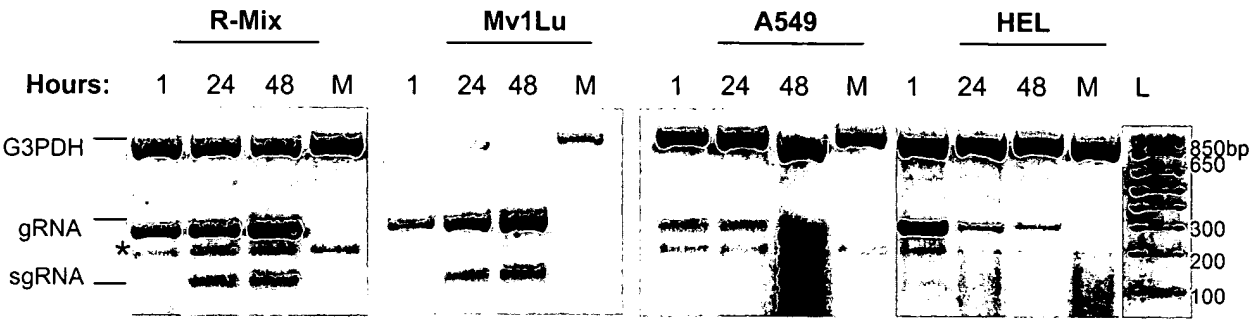


FIG. 3.

A.



B.

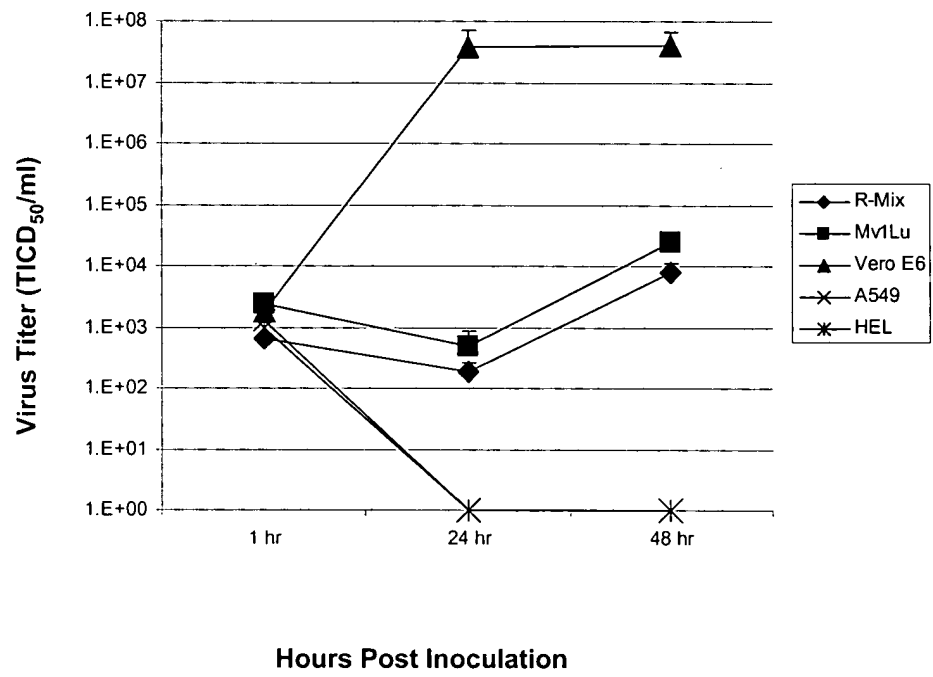
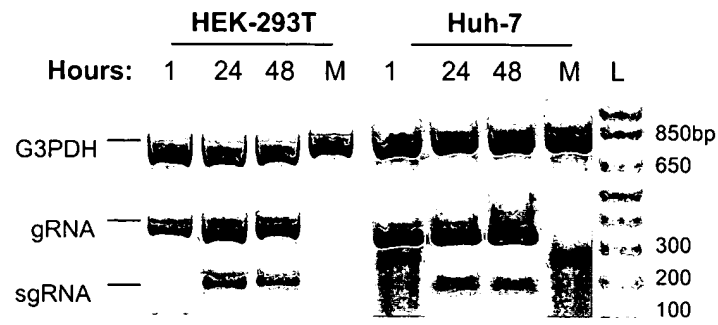


FIG. 4.

A.



B.

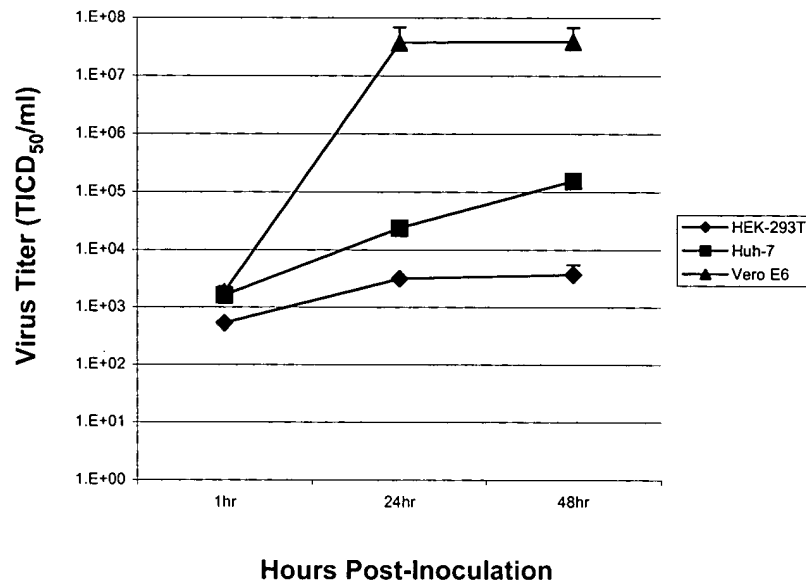
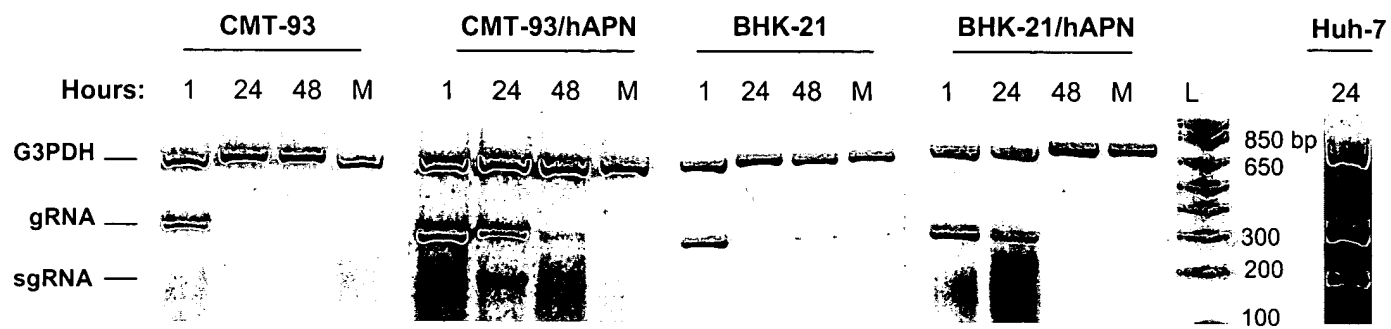


FIG. 5.

A.



B.

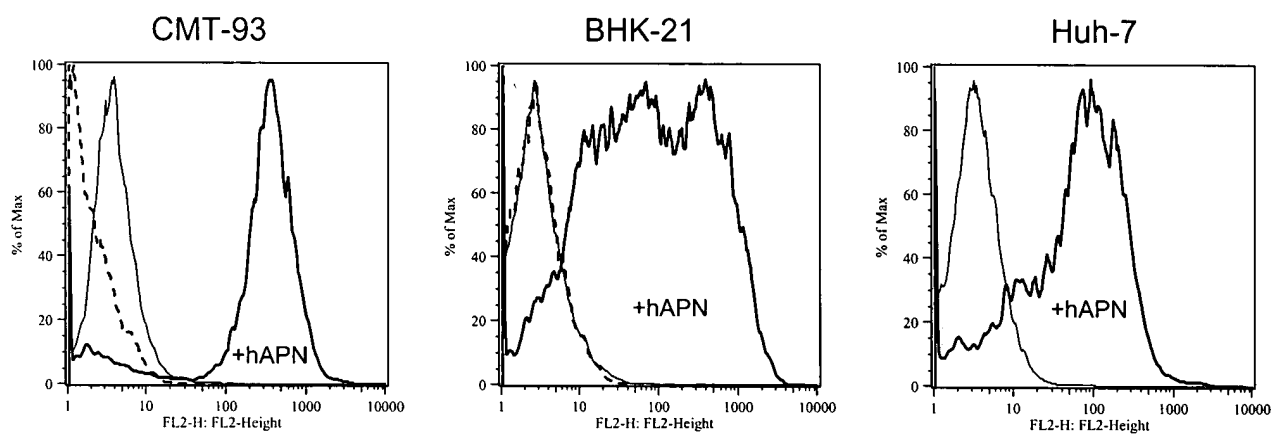


FIG. 6.

FIGURE 7A

1	atattaggtt	tttacctacc	caggaaaagc	caaccaacct	cgatctcttg	tagatctggt
61	ctctaaacga	acttttaaaat	ctgtgtagct	gtcgctcggc	tgcatgccta	gtgcacctac
121	gcagtataaa	caataataaa	ttttactgtc	gttgacaaga	aacgagtaac	tcgtccctct
181	tctgcagact	gcttacggtt	tcgtccgtgt	tgcatgcat	catcagcata	cctaggtttc
241	gtccgggtgt	gaccgaaagg	taagatggag	agccttggtc	ttggtgtcaa	cgagaaaaca
301	cacgtccaac	tcagtttgcc	tgtccttcag	gtagagacg	tgctagtgcg	tggtctcggg
361	gactctgtgg	aagaggccct	atcggaggca	cgtgaacacc	tcaaaaatgg	cacttgtggt
421	ctagtagagc	tggaaaaagg	cgtactgcc	cagcttgaac	agccctatgt	gttcattaaa
481	cgttctgatg	ccttaagcac	caatcacggc	cacaaggctg	ttgagctggt	tcagaaaatg
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601	gaaaccccaa	ttgcataccg	caatgttctt	cttcgtaaga	acggtataaa	gggagccggt
661	ggtcatagct	atggcatcga	tctaaagtct	tatgacttag	gtgacgagct	tggtcactgat
721	cccattgaag	attatgaaca	aaactggaac	actaagcatg	gcagtgggtgc	actccgtgaa
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1201	aacaatatgc	acttgtctac	cttgtgaaaa	tgtaatcatt	gcgatggcag	ctccttgag
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1321	ggacctacta	catgtgggta	cctacctact	aatgctgtag	tgaaaatgcc	atgtcctgcc
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3361	atggtgattg	taaatgctgc	taacatacac	ctgaaacatg	gtggtgggtg	agcaggtgca
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3481	ggccctctta	cagtaggagg	gtcttgtttg	ctttctggac	ataatcttgc	taagaagtgt
3541	ctgcatggtg	ttggacctaa	cctaaatgca	ggtgaggaca	tccagcttct	taaggcagca
3601	tatgaaaatt	tcaattcaca	ggacatctta	cttgacccat	tgttgtcagc	aggcatattt

FIGURE 7B

3661	ggtgcta	aac	cacttcagtc	tttacaagtg	tgcgtgcaga	cggttcgtac	acagggtttat
3721	attgcagtc	ca	atgacaaaagc	tctttatgag	caggttgca	tggattatct	tgataacctg
3781	aagcctagag	tggaagcacc	ttaaacaagag	gagccacca	acacagaaga	ttccaaaact	
3841	gaggagaaat	ctgtcgtaca	gaagcctgtc	gatgtgaagc	caaaaattaa	ggcctgcatt	
3901	gatgaggtta	ccacaacact	ggaagaaact	aagtttctta	ccaataagtt	actcttggtt	
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4081	acttggtgtg	taataccctc	caaaaaggct	ggtggcacta	ctgagatgct	ctcaagagct	
4141	ttgaagaaaag	tgccagttga	tgagtatata	accacgtacc	ctggacaagg	atgtgctggg	
4201	tatacacttg	aggaagctaa	gactgctctt	aagaaatgca	aatctgcatt	ttatgtacta	
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4321	gaaatgcttg	ctcatgctga	agagacaaga	aaattaatgc	ctatatgcat	ggatgttaga	
4381	gccataatgg	caaccatcca	acgtaagtat	aaaggaatta	aaattcaaga	gggcatcggt	
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6541	gccttagggt	taaaaaaat	tgccactcat	ggtattgctg	caattaatag	tgttccttgg	
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6781	acaactattg	ctaaaaatag	tgtaagagt	gttgctaaat	tatgtttgga	tgccggcatt	
6841	aattatgtga	agtcacccaa	attttctaaa	ttgttcacaa	tcgctatgtg	gctattgttg	
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7141	ctagacttga	caattttagg	tctggccgct	gagtggtgtt	tggtcatatat	gttggtcaca	
7201	aaattctttt	atattattagg	tctttcagct	ataatgcagg	tggtcttttg	ctattttgct	
7261	agtcattttca	tcagcaattc	ttggctcatg	tggtttatca	ttagtattgt	acaaatggca	

FIGURE 7C

7321	cccgtttctg	caatgggttag	gatgtacatc	ttcttttgctt	ctttctacta	catatggaag
7381	agctatgttc	atatcatgga	tggttgacc	tcttcgactt	gcatgatgtg	ctataagcgc
7441	aatcgtgcca	cacgcgttga	gtgtacaact	attgttaatg	gcatgaagag	atctttctat
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7621	cagtttaaaa	gaccaatcaa	ccctactgac	cagtcatcgt	atattgttga	tagtggttgct
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9601	gtgccttttt	ggataacagc	aatctatgta	ttctgtattt	ctctgaagca	ctgccattgg
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9781	gagacactgt	tgccacttac	acagtataac	aggtatcttg	ctctatataa	caagtacaag
9841	tatttcagtg	gagccttaga	tactaccagc	tatcgtgaag	cagcttgctg	ccacttagca
9901	aaggctctaa	atgacttttag	caactcaggt	gctgatgttc	tctaccaacc	accacagaca
9961	tcaatcactt	ctgctgttct	gcagagtgg	tttaggaaaa	tggaattccc	gtcaggcaaa
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10141	aactatgaag	atctgctcat	tcgcaaatcc	aaccatagct	ttcttggtca	ggctggcaat
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10621	atcaatgggt	ataggtggtt	tcttaataga	ttcaccacta	ctttgaatga	ctttaacctt
10681	gtggcaatga	agtacaacta	tgaacctttg	acacaagatc	atgttgacat	attgggacct
10741	ctttctgctc	aaacagggaat	tgccgtctta	gatattgtgt	ctgctttgaa	agagctgtgt
10801	cagaatggta	tgaatggctg	tactatcctt	ggtagcacta	ttttagaaga	tgagtttaca
10861	ccatttgatg	ttgttagaca	atgctctggg	gttaccttcc	aaggtaagtt	caagaaaatt
10921	gttaagggca	ctcatcattg	gatgctttta	actttcttga	catcactatt	gattcttggt
10981	caaagtacac	agtggctcact	gtttttcttt	gtttacgaga	atgctttctt	gccatttact

FIGURE 7D

11041	cttgggtatta	tggcaattgc	tgcattgtgct	atgctgcttg	ttaagcataa	gcacgcattc
11101	ttgtgcttgt	ttctgttacc	ttctcttgca	acagttgctt	actttaatat	ggctctacatg
11161	cctgctagct	gggtgatgcy	tatcatgaca	tggcttgaat	tggctgacac	tagcttgtct
11221	gggtataggc	tttaaggattg	tgttatgtat	gcttcagctt	tagttttgct	tattctcatg
11281	acagctcgca	ctgtttatga	tgatgctgct	agacgtgttt	ggacactgat	gaatgtcatt
11341	acacttgttt	acaaaagtcta	ctatggtaaat	gctttagatc	aagctatttc	catgtgggccc
11401	ttagttattt	ctgtaaacctc	taactattct	ggtgtcggtta	cgactatcat	gttttttagct
11461	agagctatag	tggttggtg	tggtgagat	taccattgt	tatttattac	tggcaacacc
11521	ttacagtgt	tcatgcttgt	ttattgtttc	ttaggctatt	gttgctgctg	ctactttggc
11581	cttttctgtt	tactcaaccg	ttacttcagg	cttactcttg	gtgtttatga	ctacttggct
11641	tctacacaag	aatttaggta	tatgaactcc	caggggcttt	tgcctcctaa	gagtagtatt
11701	gatgctttca	agcttaacat	taagtgtgtg	ggatttggag	gtaaaccatg	tatcaagggt
11761	gctactgtac	agtctaaaat	gtctgacgta	aagtgcacat	ctgtggtact	gctctcggtt
11821	cttcaacaac	ttagagtaga	gtcatcttct	aaattgtggg	cacaatgtgt	acaactccac
11881	aatgatattc	ttcttgcaaa	agacacaact	gaagctttcg	agaagatggg	ttctcttttg
11941	tctgttttgc	tatccatgca	gggtgctgta	gacattaata	ggttgtgcga	ggaaatgctc
12001	gataaccgtg	ctactcttca	ggctattgct	tcagaattta	gttctttacc	atcatatgcc
12061	gcttatgcca	ctgcccagga	ggcctatgag	caggctgtag	ctaattgggtga	ttctgaagtc
12121	gttctcaaaa	agttaaagaa	atctttgaat	gtggctaaat	ctgagtttga	ccgtgatgct
12181	gccatgcaac	gcaagttgga	aaagatggca	gatcaggcta	tgacccaaat	gtacaaacag
12241	gcaagatctg	aggacaagag	ggcaaaaagta	actagtgtca	tgcaaaacaat	gctcttcact
12301	atgcttagga	agcttgataa	tgatgcactt	aacaacatta	tcaacaatgc	cgctgtgggt
12361	tgtgttccac	tcaacatcat	accattgact	acagcagcca	aactcatggg	tgttgcctt
12421	gattatggta	cctacaagaa	cacttgtgat	ggtaaacacct	ttacatatgc	atctgcactc
12481	tgggaaatcc	agcaagttgt	tgatgcggat	agcaagattg	ttcaacttag	tgaatttaac
12541	atggacaatt	caccaaattt	ggcttggcct	cttattgtta	cagctctaag	agccaactca
12601	gctgttaaac	tacagaataa	tgaactgagt	ccagtagcac	tacgacagat	gtcctgtgcg
12661	gctgggtacca	cacaaacagc	ttgtactgat	gacaatgcac	ttgcctacta	taacaattcg
12721	aaggggaggta	ggtttgtgct	ggcattacta	tcagaccacc	aagatctcaa	atgggctaga
12781	ttccctaaga	gtgatggtag	aggtagaatt	tacacagaac	tgggaaccacc	ttgtagggtt
12841	gttacagaca	caccaaagg	gcttaaaagt	aaatacttgt	acttcatcaa	aggcttaaac
12901	aacctaaata	gaggtatgg	gctgggcagt	ttagctgcta	cagtacgtct	tcaggctgga
12961	aatgctacag	aagtacctgc	caattcaact	gtgctttcct	tctgtgcttt	tgtagtagac
13021	cctgctaaaag	catataagga	ttacttagca	agtgaggag	aaccaatcac	caactgtgtg
13081	aagatgttgt	gtacacacac	tggtagagga	caggcaatta	ctgtaacacc	agaagctaac
13141	atggaccaag	agtcctttgg	tggtagcttca	tgttgtctgt	attgtagatg	ccacattgac
13201	catccaaatc	ctaaaggatt	ctgtgacttg	aaaggtaagt	acgtccaaat	acctaccact
13261	tgtgctaatt	acccagtggg	ttttacactt	agaaacacag	tctgtaccgt	ctgcggaatg
13321	tggaaagggt	atggctgtag	ttgtgaccaa	ctccgcgaac	ccttgatgca	gtctgcggat
13381	gcatcaactg	ttttaaacgg	gtttgcgggt	taagtgcagc	ccgtcttaca	ccgtgcggca
13441	caggcactag	tactgatgtc	gtctacaggg	cttttgatat	ttacaacgaa	aaagtgtgtg
13501	gttttgcaaa	gttcctaaaa	actaattgct	gtcgcttcca	ggagaaggat	gaggaaggca
13561	atttattaga	ctcttacttt	gtagttaaga	ggcatactat	gtctaactac	caacatgaag
13621	agactattta	taacttgggt	aaagattgtc	cagcggttgc	tgtccatgac	tttttcaagt
13681	ttagagtaga	tggtgacatg	gtaccacata	tatcacgtca	gcgtctaact	aaatacacaa
13741	tggctgattt	agtctatgct	ctacgtcatt	ttgatgagg	taattgtgat	acattaaaag
13801	aaatactcgt	cacatacaat	tgctgtgatg	atgattattt	caataagaag	gatttggtatg
13861	acttcgtaga	gaatcctgac	atcttacgcg	tatatgctaa	cttaggtgag	cgtgtacgcc
13921	aatcattatt	aaagactgta	caattctgcg	atgctatgcy	tgatgcaggc	attgtaggcg
13981	tactgacatt	agataatcag	gatcttaatt	ggaactggta	cgatttcggt	gatttcgtac
14041	aagtagcacc	aggctgcgga	gttcctattg	tggattcata	ttactcattg	ctgatgcccc
14101	tcctcaactt	gactagggca	ttggctgctg	agtcccatat	ggatgtgat	ctcgcaaaac
14161	cacttattaa	gtgggatttg	ctgaaatatg	attttacgga	agagagactt	tgtctcttcg
14221	accgttattt	taaatattgg	gaccagacat	accatcccaa	ttgtattaac	tgtttggatg
14281	atagggtgat	ccttcattgt	gcaaaacttt	atgtgttatt	ttctactgtg	ttccaccta
14341	caagtttttg	accactagta	agaaaaatat	ttgtagatgg	tgttcctttt	gttgtttcaa
14401	ctggatacca	ttttcgtgag	ttaggagtcg	tacataatca	ggatgtaaac	ttacatagct
14461	cgcgtctcag	tttcaaggaa	cttttagtgt	atgctgctga	tccagctatg	catcagactt
14521	ctggcaattt	attgctagat	aaacgcacta	catgcttttc	agtactgtga	ctaacaacaa
14581	atgttgcttt	tcaaaactgtc	aaaccgggta	attttaataa	agacttttat	gactttgctg
14641	tgtctaaagg	tttctttaag	gaagggaagt	ctgttgaact	aaaacacttc	ttctttgctc
14701	aggatggcaa	cgctgctatc	agtgattatg	actattatcg	ttataatctg	ccaacaatgt

FIGURE 7E

14761	gtgatatcag	acaactccta	ttcgtagtgtg	aagttgttga	taaatacttt	gattgttacg
14821	atgggtggctg	tattaatgcc	aaccaagtaa	tcgttaacaa	tctggataaa	tcagctgggt
14881	tcccatttaa	taaatgggt	aaggctagac	tttattatga	ctcaatgagt	tatgaggatc
14941	aagatgcact	tttcgcgtat	actaagcgta	atgtcatccc	tactataact	caaatgaatc
15001	ttaagtatgc	cattagtgc	aagaatagag	ctcgaccgt	agctgggtgc	tctatctgta
15061	gtactatgac	aaatagacag	tttcatcaga	aattattgaa	gtcaatagcc	gccactagag
15121	gagctactgt	ggtaattgga	acaagcaagt	tttacgggtg	ctggcataat	atgttaaaaa
15181	ctgttttacg	tgatgtagaa	actccacacc	ttatgggttg	ggattatcca	aaatgtgaca
15241	gagccatgcc	taacatgctt	aggataatgg	cctctcttgt	tcttgctcgc	aaacataaca
15301	cttgctgtaa	cttatcacac	cgtttctaca	ggttagctaa	cgagtgtgcg	caagtattaa
15361	gtgagatgg	catgtgtggc	ggctcactat	atgttaaacc	agggtggaaca	tcacccgggtg
15421	atgctacaac	tgcttatgct	aatagtgtct	ttaacatttg	tcaagctgtt	acagccaatg
15481	taaatgcact	tctttcaact	gatggtaata	agatagctga	caagtatgtc	cgcaatctac
15541	aacacaggct	ctatgagtgt	ctctatagaa	atagggatgt	tgatcatgaa	ttcgtggatg
15601	agttttacgc	ttacctgctg	aaacatttct	ccatgatgat	tctttctgat	aatgctgtg
15661	tgtgctataa	cagtaactat	gcggctcaag	gttttagtagc	tagcattaag	aactttaagg
15721	cagttcttta	ttatcaaaat	aatgtgttca	tgtctgaggc	aaaatgttgg	actgagactg
15781	accttactaa	aggacctcac	gaattttgct	cacagcatac	aatgctagt	aaacaaggag
15841	atgattacgt	gtacctgcct	taccagatc	catcaagaat	attaggcgca	ggctgttttg
15901	tcgatgat	tgtaaaaaa	gatggtaac	ttatgattga	aaggttcgtg	tcactggcta
15961	ttgatgctta	cccacttaca	aaacattcta	atcaggagta	tgctgatgtc	tttactgtg
16021	atttacaata	cattagaaag	ttacatgatg	agcttactgg	ccacatgttg	gacatgtatt
16081	ccgtaatgct	aactaatgat	aacacctcac	gggtactggga	acctgagttt	tatgaggcta
16141	tgtacacacc	acatacagtc	ttgcaggctg	taggtgcttg	tgtattgtgc	aattcacaga
16201	cttcacttcg	ttgcggtgcc	tgtattagga	gaccattcct	atgttgcaag	tgctgctatg
16261	accatgtcat	ttcaacatca	cacaaattag	tgttgctctg	taatccctat	gtttgcaatg
16321	ccccaggttg	tgatgtcact	gatgtgacac	aactgtatct	aggaggtatg	agctattatt
16381	gcaagtcaca	taagcctccc	attagttttc	cattatgtgc	taatggctcag	gtttttgggt
16441	tatacaaaaa	cacatgtgta	ggcagtgaca	atgtcactga	cttcaatgcg	atagcaacat
16501	gtgattggac	taatgctggc	gattacatac	ttgccaacac	ttgtactgag	agactcaagc
16561	ttttcgcagc	agaaacgctc	aaagccactg	aggaaacatt	taagctgtca	tatggtattg
16621	ctactgtacg	cgaagtactc	tctgacagag	aattgcatct	ttcatgggag	gttggaaaac
16681	ctagaccacc	attgaacaga	aactatgtct	ttactgggta	ccgtgtaact	aaaaatagta
16741	aagtacagat	tggagagtac	acctttgaaa	aaggtgacta	tgggtgatgct	gttggtgaca
16801	gaggtactac	gacatacaag	ttgaatgttg	gtgattactt	tgtgttgaca	tctcacactg
16861	taatgccact	tagtgacact	actctagtgc	cacaagagca	ctatgtgaga	attactggct
16921	tgtacccaac	actcaacatc	tcagatgagt	tttctagcaa	tgttgcaaat	tatcaaaagg
16981	tcggcatgca	aaagtactct	acactccaag	gaccacctgg	tactggtaag	agtcattttg
17041	ccatcggact	tgctctctat	tacctactcg	ctcgcatagt	gtatacggca	tgctctcatg
17101	cagctggtga	tgccctatgt	gaaaaggcat	taaaatattt	gcccatagat	aaatgtagta
17161	gaatcatacc	tgcgcggtgcg	cgcgtagagt	gttttgataa	attcaaagtg	aattcaacac
17221	tagaacagta	tgttttctgc	actgtaaatg	cattgccaga	aacaactgct	gacattgtag
17281	tctttgatga	aatctctatg	gctactaatt	atgacttgag	tgttgtcaat	gctagacttc
17341	gtgcaaaaaca	ctacgtctat	attggcgatc	ctgctcaatt	accagcccc	cgacatttgc
17401	tgactaaagg	cacactagaa	ccagaatatt	ttaattcagt	gtgcagactt	atgaaaacaa
17461	taggtccaga	catgttcctt	ggaacttgtc	gccgttgtcc	tgctgaaatt	gttgacactg
17521	tgagtgcctt	agtttatgac	aataagctaa	aagcacacaa	ggataagtca	gctcaatgct
17581	tcaaaatggt	ctacaaaggt	gttattacac	atgatgtttc	atctgcaatc	aacagacctc
17641	aaataggcgt	tgtaagagaa	tttcttacac	gcaatcctgc	ttggagaaaa	gctgttttta
17701	tctcacctta	taattcacag	aacgctgtag	cttcaaaaaat	cttaggattg	cctacgcaga
17761	ctgttgattc	atcacagggt	tctgaatatg	actatgtcat	attcacacaa	actactgaaa
17821	cagcacactc	ttgtaatgtc	aaccgcttca	atgtggctat	cacaagggca	aaaattggca
17881	ttttgtgcat	aatgtctgat	agagatcttt	atgacaaaact	gcaatttaca	agtctagaaa
17941	taccacgtcg	caatgtggct	acattacaag	cagaaaaatgt	aactggactt	tttaaggact
18001	gtagtaagat	cattactgg	cttcatccta	cacaggcacc	tacacacctc	agcgttgata
18061	taaagttcaa	gactgaagga	ttatgtgttg	acataccagg	cataccaaag	gacatgacct
18121	accgtagact	catctctatg	atgggtttta	aaatgaatta	ccaagtcaat	ggttacccta
18181	atatgtttat	cacccgcgaa	gaagctattc	gtcacgttcg	tgcgtggatt	ggctttgatg
18241	tagagggctg	tcatgcaact	agagatgctg	tgggtactaa	cctacctctc	cagctaggat
18301	tttctacagg	tgtaactta	gtagctgtac	cgactgggtta	tgttgacact	gaaaataaca
18361	cagaattcac	cagagttaat	gcaaaacctc	caccaggtga	ccagtttaaa	catcttatac
18421	cactcatgta	taaaggcttg	ccctggaatg	tagtgcgat	taagatagta	caaagtctca

FIGURE 7F

18481	gtgatacact	gaaaggattg	tcagacagag	tcgtgttcgt	cctttgggcg	catggctttg
18541	agcttacatc	aatgaagtac	tttgtcaaga	ttggacctga	aagaacgtgt	tgtctgtgtg
18601	acaaacgtgc	aacttgcttt	tctacttcat	cagatactta	tgctgtctgg	aatcattctg
18661	tggtgtttga	ctatgtctat	aacccattta	tgattgatgt	tcagcagtg	ggctttacgg
18721	gtaaccttca	gagtaacat	gaccaacatt	gccaggtaca	tggaatgca	catgtggcta
18781	gttgtgatgc	tatcatgact	agatgtttag	cagtccatga	gtgctttgtt	aagcgcgttg
18841	attggtctgt	tgaataccct	attataggag	atgaactgag	ggttaattct	gcttgcagaa
18901	aagtacaaca	catggttgtg	aagtctgcat	tgcttgctga	taagtttcca	gttcttcatg
18961	acattggaaa	tccaaaggct	atcaagtgtg	tgcttcaggc	tgaagtagaa	tggaagtctt
19021	acgatgctca	gccatgtagt	gacaaagcct	acaaaataga	ggagctcttc	tattcttatg
19081	ctacacatca	cgataaattc	actgatgggt	tttgtttgtt	ttggaattgt	aacgttgatc
19141	gttaccacgc	caatgcaatt	gtgtgtaggt	ttgacacaag	agtcttgctca	aacttgaact
19201	taccaggctg	tgatgggtgt	agtttgtatg	tgaataagca	tgcatccac	actccagctt
19261	tcgataaaaag	tgcatttact	aatttaaagc	aattgccttt	cttttactat	tctgatagtc
19321	cttgtgagtc	tcatggcaaa	caagttagtg	cggataattga	ttatgtttcca	gtcaaatctg
19381	ctacgtgtat	tacacgatgc	aatttaggtg	gtgctgtttg	cagacacat	gcaaagtgtg
19441	accgacagta	cttggatgca	tataatatga	tgatttctgc	tggaatttagc	ctatggattt
19501	acaaacaatt	tgatacttat	aacctgtgga	atacatttac	caggttacag	agtttagaaa
19561	atgtggctta	taatgttgtt	aataaaggac	actttgatgg	acacgccggc	gaagcacctg
19621	tttccatcat	taataatgct	gtttacacaa	aggtagatgg	tattgatgtg	gagatctttg
19681	aaaataagac	aacacttcct	gttaactgtg	catttgagct	ttgggctaag	cgtaacatta
19741	aaccagtgcc	agagattaag	atactcaata	atttgggtgt	tgatctcgct	gtcaatactg
19801	taatctggga	ctacaaaaga	gaagccccag	cacatgtatc	tacaataggt	gtctgcacaa
19861	tgactgacat	tgccaagaaa	cctactgaga	gtgcttggtc	ttcacttact	gtctgttttg
19921	atggtagagt	ggaaggacag	gtagaccttt	ttagaaaacgc	ccgtaatggg	gttttaataa
19981	cagaaggttc	agtcaaaagg	ctaacacctt	caaaggggacc	agcacaagct	agcgtcaatg
20041	gagtcacatt	aattggagaa	tcagtaaaaa	cacagtttaa	ctactttaag	aaagttagcg
20101	gcattattca	acagttgcct	gaaacctact	ttactcagag	cagagactta	gaggatttta
20161	agcccagatc	acaaatggaa	actgactttc	tcgagctcgc	tatggatgaa	ttcatacagc
20221	gatataagct	cgagggtctat	gccttcgaac	acatcgttta	tggaattttc	agtcatggac
20281	aacttggcgg	tcttcattta	atgataaggct	tagccaagcg	ctcacaagat	tcaccactta
20341	aattagagga	ttttatccct	atggacagca	cagtgaaaaa	ttacttcata	acagatgcgc
20401	aaacaggttc	atcaaaatgt	gtgtgttctg	tgattgatct	tttacttgat	gactttgtcg
20461	agataataaa	gtcacaaagt	ttgtcagtga	tttcaaaagt	ggtcaagggt	acaattgact
20521	atgctgaaat	ttcattcatg	ctttgggtgta	aggatggaca	tggtgaaacc	ttctacccaa
20581	aactacaagc	aagtcaagcg	tggaaccag	gtgttgcat	gcctaacttg	tacaagatgc
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20701	aaggaataat	gatgaatgtc	gcaaagtata	ctcaactgtg	tcaatactta	aatacactta
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20821	ttgcaccagg	tacagctgtg	ctcagacaat	gggttgccaac	tggcacacta	cttgtcgatt
20881	cagatcttaa	tgacttcgtc	tccgacgcag	attctacttt	aattggagac	tgtgcaacag
20941	tacatacggc	taataaatgg	gaccttatta	ttagcgatat	gtatgaccct	aggaccaaac
21001	atgtgacaaa	agagaatgac	tctaaagaag	gggttttcac	ttatctgtgt	ggatttataa
21061	agcaaaaaact	agccctgggt	ggttctatag	ctgtaaagat	aacagagcat	tcttggaatg
21121	ctgaccttta	caagcttatg	ggccattttc	catgggtggac	agctttttgt	acaaatgtaa
21181	atgcatcatc	atcggaagca	tttttaattg	gggctaacta	tcttgccaag	ccgaaggaa
21241	aaattgatgg	ctataccatg	catgctaact	acattttctg	gaggaacaca	aatcctatcc
21301	agttgtcttc	ctattcactc	tttgacatga	gcaaatttcc	tcttaaatta	agaggaactg
21361	ctgtaatgtc	tcttaaggag	aatcaaatca	atgatatgat	ttattctctt	ctggaaaaag
21421	gtaggcttat	cattagagaa	aacaacagag	ttgtgggttc	aagtgatatt	cttgtaataa
21481	actaaacgaa	catgtttatt	ttcttattat	ttcttactct	cactagtggg	agtgaccttg
21541	accggtgcac	cacttttgat	gatgttcaag	ctcctaatta	cactcaacat	cattcatcta
21601	tgaggggggt	ttactatcct	gatgaaattt	ttagatcaga	cactctttat	ttaactcagg
21661	atttattttct	tccattttat	tctaattgta	cagggtttca	tactattaat	catacgtttg
21721	gcaaccctgt	catacccttt	aaggatggta	tttattttgc	tgccacagag	aaatcaaatg
21781	ttgtccgtgg	ttgggttttt	ggttctacca	tgaacaacaa	gtcacagtcg	gtgattatta
21841	ttaacaattc	tactaatgtt	gttatacag	catgtaactt	tgaattgtgt	gacaaccctt
21901	tctttgctgt	ttctaaaccc	atgggtacac	agacacatac	tatgatattc	gataatgcat
21961	ttaattgcac	tttcgagtac	atatctgatg	ccttttcgct	tgatgtttca	gaaaagtcag
22021	gtaattttta	acacttacga	gagtttgtgt	ttaaaaataa	agatgggttt	ctctatgttt
22081	ataagggcta	tcaacctata	gatgtagttc	gtgatctacc	ttctgggttt	aacactttga
22141	aacctatttt	taagttgcct	cttgggtatta	acattacaaa	ttttagagcc	attcttacag

FIGURE 7G

22201	cctttttcacc	tgctcaagac	atttgggggca	cgtcagctgc	agcctatttt	gttggctatt
22261	taaagccaac	tacatttatg	ctcaagtatg	atgaaaatgg	tacaatcaca	gatgctgttg
22321	attgttctca	aaatccactt	gctgaactca	aatgctctgt	taagagcttt	gagattgaca
22381	aaggaattta	ccagacctct	aatttcaggg	ttgttccctc	aggagatgtt	gtgagattcc
22441	ctaataattac	aaacttgtgt	ccttttggag	aggtttttaa	tgctactaaa	ttcccttctg
22501	tctatgcatg	ggagagaaaa	aaaatttcta	atttgtgtgc	tgattactct	gtgctctaca
22561	actcaacatt	tttttcaacc	tttaagtgtc	atggcgtttc	tgccactaag	ttgaatgac
22621	tttgcttctc	caatgtctat	gcagattctt	ttgtagtcaa	gggagatgat	gtaagacaaa
22681	tagcgccagg	acaaaactgg	gttattgtcg	tttaatttta	taaattgcc	gatgatttca
22741	tgggttgtgt	ccttgcttgg	aatactagga	acattgatgc	tacttcaact	ggtaattata
22801	attataaata	taggtatctt	agacatggca	agcttaggcc	ctttgagaga	gacatatcta
22861	atgtgccttt	ctcccctgat	ggcaaacctt	gcacccacc	tgctcttaat	tgttattggc
22921	cattaaatga	ttatggtttt	tacaccacta	ctggcattgg	ctaccaacct	tacagagttg
22981	tagtactttc	ttttgaactt	ttaaatgcac	cggccacggg	ttgtggacca	aaattatcca
23041	ctgaccttat	taagaaccag	tgtgtcaatt	tttaatttta	tggactcat	ggtactggtg
23101	tgttaactcc	ttcttcaaag	agatttcaac	catttcaaca	atttggccgt	gatgtttctg
23161	atttctactga	ttccgttcga	gatcctaaaa	catctgaaat	attagacatt	tcacctgtct
23221	cttttggggg	tgtaagtgt	attacacctg	gaacaaatgc	ttcatctgaa	gttgctgttc
23281	tatatcaaga	tgtaactgc	actgatgttt	ctacagcaat	tcatgcagat	caactcacac
23341	cagcttggcg	catatattct	actggaaaca	atgtattcca	gactcaagca	ggctgtctta
23401	taggagctga	gcattgtcgac	acttcttatg	agtgcgacat	tcctattgga	gctggcattt
23461	gtgctagtta	ccatacagtt	tctttattac	gtagtactag	ccaaaaatct	atttgggctt
23521	atactatgtc	tttaggtgct	gatagttcaa	ttgcttactc	taataacacc	attgctatac
23581	ctactaactt	ttcaattagc	attactacag	aagtaatgcc	tgtttctatg	gctaaaacct
23641	ccgtagattg	taatattgtac	atctgcggag	atttactga	atgtgcta	ttgcttctcc
23701	aatatggtag	cttttgcaca	caactaaatc	gtgcactctc	aggtattgct	gctgaacagg
23761	atcgcaacac	acgtgaagtg	ttcgctcaag	tcaaacaat	gtacaaaacc	ccaactttga
23821	aatatttttg	tggtttta	ttttcacaaa	tattacctga	ccctctaagg	ccaactaaga
23881	ggtcttttat	tgaggacttg	ctctttaata	aggtgacact	cgctgatgct	ggcttcatga
23941	agcaatatgg	cgaatgccta	ggtgatatta	atgctagaga	tctcatttgt	gcgcagaagt
24001	tcaatggact	tacagtgttg	ccacctctgc	tactgatga	tatgattgct	gcctacactg
24061	ctgctctagt	tagtggtagt	gccactgctg	gatggacatt	tggtgctggc	gctgctcttc
24121	aaataccttt	tgctatgcaa	atggcatata	gggtcaatgg	cattggagtt	accctaaatg
24181	ttctctatga	gaaccaaaaa	caaatcgcca	accaatttaa	caaggcgatt	agtcnaattc
24241	aagaatcact	tacaacaaca	tcaactgcat	tgggcaagct	gcaagacgtt	gttaaccaga
24301	atgctcaagc	attaaacaca	cttggttaaac	aacttagctc	taattttggt	gcaatttcaa
24361	gtgtgctaaa	tgatatcctt	tgcgcacttg	ataaaagtcga	ggcggaggta	caaattgaca
24421	ggttaattac	aggcagactt	caaagccttc	aaacctatgt	aacacaacaa	ctaactcagg
24481	tcgactgaa	cagggtctt	gctaactctg	ctgctactaa	aatgtctgag	tggttctctg
24541	gacaatcaaaa	aagagttgac	ttttgtggaa	agggctacca	ccttatgtcc	ttcccacaag
24601	cagccccgca	tggtgtgtgc	ttcctacatg	tcacgtatgt	gccatcccag	gagaggaact
24661	tcaccacagc	gccagcaatt	tgctcatgaag	gcaaagcata	cttccctcgt	gaaggtgttt
24721	ttgtgtttaa	tggcacttct	tggtttatta	cacagaggaa	cttcttttct	ccacaaataa
24781	ttactacaga	caatacattt	gtctcaggaa	atttgtatgt	cgttattggc	atcattaaca
24841	acacagttta	tgatcctctg	caacctgagc	tcgactcatt	caaagaagag	ctggacaagt
24901	acttcaaaaa	tcatacatca	ccagatgttg	atcttggcga	catttcaggc	attaacgctt
24961	ctgtcgtcaa	cattcaaaaa	gaaattgacc	gcctcaatga	ggctcgctaaa	aatttaaatg
25021	aatcactcat	tgaccttcaa	gaattgggaa	aatatgagca	atatattaaa	tgcccttggt
25081	atgtttggct	cggcttcatt	gctggactaa	ttgccatcgt	catggttaca	atcttgcttt
25141	gttgcatgac	tagttgttgc	agttgcctca	aggggtgatg	ctcttggtgt	tcttgctgca
25201	agtttgatga	ggatgactct	gagccagttc	tcaagggtgt	caaattacat	tacacataaa
25261	cgaacttatg	gatttgttta	tgagattttt	tactcttggg	tcaattactg	cacagccagt
25321	aaaaattgac	aatgcttctc	ctgcaagtac	tgttcatgct	acagcaacga	taccgctaca
25381	agcctcactc	cctttcggat	ggcttggtat	tggcgttgca	tttcttgctg	tttttcagag
25441	cgctaccaaaa	ataattgcgc	tcaataaaaag	atggcagcta	gccctttata	agggcttcca
25501	gttcatttgc	aatttactgc	tgctatttgt	taccatctat	tcacatcttt	tgcttgcgc
25561	tgcaggatg	gaggcgcaat	ttttgtacct	ctatgccttg	atatattttc	tacaatgcat
25621	caacgcagt	agaattatta	tgagattttg	gctttgttgg	aagtgcnaat	cacaagaacc
25681	attactttat	gatgccaaact	actttgtttg	ctggcacaca	cataactatg	actactgtat
25741	accatataac	agtgtcacag	atacaattgt	cgttactgaa	ggtgacggca	tttcaacacc
25801	aaaactcaaa	gaagactacc	aaattgggtg	ttattctgag	gataggcact	caggtgttaa
25861	agactatgtc	gttgtacatg	gctatttca	cgaagtttac	taccagcttg	agtctacaca

FIGURE 7H

25921	aattactaca	gacactggta	ttgaaaatgc	tacattcttc	atctttaaca	agcttggttaa
25981	agaccaccg	aatgtgcaaa	tacacacaat	cgacggctct	tcaggagttg	ctaaccagc
26041	aatggatcca	atztatgatg	agccgacgac	gactactagc	gtgcctttgt	aagcacaaga
26101	aagtgagtac	gaacttatgt	actcattcgt	ttcggaagaa	acaggtagct	taatagttaa
26161	tagcgacttt	ctttttcttg	ctttcgtggg	attcttgcta	gtcacactag	ccatccttac
26221	tgcgcttcga	ttgtgtgcgt	actgctgcaa	tattgttaac	gtgagtttag	taaaaccaac
26281	ggttttacgtc	tactcgcggt	ttaaaaaatct	gaactcttct	gaaggagttc	ctgatcttct
26341	ggctctaaacg	aactaactat	tattattatt	ctgtttgga	ctttaacatt	gcttatcatg
26401	gcagacaacg	gtactattac	cgttgaggag	cttaaaacaac	tcctggaaca	atggaacctt
26461	gtaatagggtt	tcctattcct	agcctggatt	atgttactac	aatttgcccta	ttctaactcg
26521	aacagggtttt	tgtacataat	aaagcttggt	ttcctctggc	tcttggtggc	agtaaacatt
26581	gcttggttttg	tgcttgctgc	tgtctacaga	attaattggg	tgactggcgg	gattgcgatt
26641	gcaatggctt	gtattgtagg	cttgatgtgg	cttagctact	tcgttgcttc	cttcaggctg
26701	tttgctcgta	cccgtcaat	gtggctcattc	aaccagaaa	caaacattct	tctcaatgtg
26761	cctctccggg	ggacaattgt	gaccagaccg	ctcatggaaa	gtgaactgtt	cttggtgct
26821	gtgatcattc	gtggtcactt	gcgaatggcc	ggacaccccc	tagggcgctg	tgacattaa
26881	gacctgccaa	aagagatcac	tgtggctaca	tcacgaacgc	tttcttatta	caaattagga
26941	gcgtcgcgagc	gtgtaggcac	tgattcaggt	tttgctgcat	acaaccgcta	ccgtattgga
27001	aactataaat	taaatacaga	ccacgccggt	agcaacgaca	atattgcttt	gctagtagag
27061	taagtgcaca	cagatgtttc	atcttggtga	cttccagggt	acaatagcag	agatattgat
27121	tatcattatg	aggactttca	ggattgctat	ttggaatctt	gacgttataa	taagttcaat
27181	agtgcagaca	ttattttaagc	ctctaactaa	gaagaattat	tcggagttag	atgatgaaga
27241	acctatggag	ttagattatc	cataaaacga	acatgaaaat	tattctcttc	ctgacattga
27301	ttgtattttac	atcttgcgag	ctatatcact	atcaggagtg	tgtagaggt	acgactgtac
27361	tactaaaaga	accttgccca	tcagggaacat	acgagggcaa	ttcaccattt	caccctcttg
27421	ctgacaataa	atttgcacta	acttgacta	gcacacactt	tgcttttgct	tgtgctgacg
27481	gtactcgaca	tacctatcag	ctgcgtgcaa	gatcagtttc	acaaaaactt	ttcatcagac
27541	aagaggagggt	tcaacaagag	ctctactcgc	cactttttct	cattgttgct	gctctagtat
27601	ttttaataact	ttgcttcacc	attaagagaa	agacagaatg	aatgagctca	ctttaattga
27661	cttctatttg	tgcttttttag	cctttctgct	attccttggt	ttaataatgc	ttattatatt
27721	ttgggttttca	ctcgaaatcc	aggatctaga	agaaccttgt	accaaagtct	aaacgaacat
27781	gaaactttctc	attgttttga	cttgattttc	tctatgcagt	tgcatatgca	ctgtagtaca
27841	gcgctgtgca	tctaataaac	ctcatgtgct	tgaagatcct	tgtaaggtag	aacactaggg
27901	gtaataactta	tagcactgct	tggctttgtg	ctctaggaaa	ggttttacct	tttcatagat
27961	ggcacactat	ggttcaaaca	tgcacaccta	atgttactat	caactgtcaa	gatccagctg
28021	gtggtgcgct	tatagctagg	tggttggtacc	ttcatgaagg	tcaccaaact	gctgcattta
28081	gagacgtact	tgttgtttta	aataaacgaa	caaattaaaa	tgtctgataa	tggaccccaa
28141	tcaaaccaac	gtagtgtccc	ccgcattaca	tttggtggac	ccacagattc	aactgacaat
28201	aaccagaatg	gaggacgcaa	tggggcaagg	ccaaaacagc	gccgacccca	aggtttaccc
28261	aataataactg	cgtcttggtt	cacagctctc	actcagcatg	gcaaggagga	acttagattc
28321	cctcgaggcc	agggcggtcc	aatcaacacc	aatagtggct	cagatgacca	aattggctac
28381	taccgaagag	ctacccgacg	agttcgtggg	ggtagcggca	aaatgaaaga	gctcagcccc
28441	agatgggtact	tctattacct	aggaactggc	ccagaagctt	cacttcctta	cggcgctaac
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28621	ttgccaaaag	gcttctacgc	agagggaagc	agaggcggca	gtcaagcctc	ttctcgctcc
28681	tcatcacgta	gtcgcggtta	ttcaagaaat	tcaactcctg	gcagcagtag	gggaaattct
28741	cctgctcgaa	tggctagcgg	aggtggtgaa	actgccctcg	cgctattgct	gctagacaga
28801	ttgaaccagc	ttgagagcaa	agtttctggg	aaaggccaac	aacaacaagg	ccaaactgtc
28861	actaagaaat	ctgctgctga	ggcatctaaa	aagcctcgcc	aaaaacgtac	tgccacaaaa
28921	cagtacaacg	tactcaagc	atttgggaga	cgtgggtccag	aacaaaccca	aggaaatttc
28981	ggggaccaag	acctaatacag	acaaggaaact	gattacaaac	attggccgca	aattgcacaa
29041	tttgctccaa	gtgcctctgc	attctttgga	atgtcacgca	ttggcatgga	agtcacacct
29101	tcgggaacat	ggctgactta	tcatggagcc	attaaattgg	atgacaaaga	tccacaattc
29161	aaagacaacg	tcatactgct	gaacaagcac	attgacgcat	acaaaacatt	cccaccaaca
29221	gagcctaaaa	aggacaaaaa	gaaaaagact	gatgaagctc	agcctttgcc	gcagagacaa
29281	aagaagcagc	ccactgtgac	tcttcttctc	gcggctgaca	tggatgattt	ctccagacaa
29341	cttcaaaaatt	ccatgagtgg	agctttctgct	gattcaactc	aggcataaac	actcatgatg
29401	accacacaag	gcagatgggc	tatgtaaacg	ttttcgcaat	tccgtttacg	atacatagtc
29461	tactcttggtg	cagaatgaat	tctcgtaact	aaacagcaca	agtaggttta	gttaacttta
29521	atctcacata	gcaatcttta	atcaatgtgt	aacattaggg	aggacttgaa	agagccacca
29581	cattttcatc	gaggccacgc	ggagtacgat	cgagggtaca	gtgaataatg	ctaggagag

FIGURE 7I

29641 ctgcctatat ggaagagccc taatgtgtaa aattaatttt agtagtgcta tccccatgtg
29701 attttaatag cttcttagga gaatgac

FIGURE 8 A

1 atattaggtt ttacctacc caggaaaagc caaccaacct cgatctcttg tagatctgtt
 61 ctctaaacga actttaaaat ctgtgtagct gtcgctcggc tgcattgcta gtgcacctac
 121 gcagtataaa caataataaa tttactgtc gttgacaaga aacgagtaac tcgtccctct
 181 tctgcagact gcttacgggt tcgtccgtgt tgcagtcgat catcagcata cctaggtttc
 241 gtccgggtgt gaccgaaagg taagatggag agccttggtc ttggtgtcaa cgagaaaaca
 301 cagtcacaac tcagtttgcc tgccttcag gtagagacg tgcagtcg tggcttcggg
 361 gactctgtgg aagaggccct atcggaggca cgtgaacacc tcaaaaatgg cactgtgtgt
 421 ctatgtaggc tggaaaaagg cgtactgcc cagcttgaac agccctatgt gttcattaaa
 481 cgttctgatg ccttaagcac caatcacggc cacaaggctg ttgagctggt tgcagaaatg
 541 gacggcattc agtacggctg tagcggata aactggggag tactcgtgcc acatgtgggc
 601 gaaaccccaa ttgcataccg caatgttctt ctctgaaga acggaataa gggagccggt
 661 ggtcatagct atggcatcga tctaaagtct tatgacttag gtgacgagct tggcactgat
 721 cccattgaag attatgaaca aaactggaac actaagcatg gcagtggtgc actccgtgaa
 781 ctactcgtg agtcaatgg aggtgcagtc actcgtatg tcgacaacaa ttctgtggc
 841 ccagatgggt accctcttga ttgcatcaaa gatcttctg cagcgcggg caagtcaatg
 901 tgcactctt ccgaacaact tgattacac gagtcgaaga gaggtgtcta ctgctccgt
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 1021 acacccttcg aaattaagag tgccaagaaa ttgacactt tcaaggggga atgcccgaag
 1081 ttgtgttc ctcttaactc aaaagtcaaa gtcattcaac cagtggtga aaagaaaaag
 1141 actgagggtt tcatggggcg tatacgtct gtgtaccctg ttgcatcctc acaggagtgt
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 1261 acgtgcgact ttctgaaagc cactgtgaa cattgtggca ctgaaaattt agttattgaa
 1321 ggacctacta catgtgggta cctacctact aatgcttag tgaaaatgcc atgtctgcc
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 1561 tcaggccata ctggcattac tggtgacaat tgggagacct tgaatgagga tctccttgag
 1621 atactgagtc gtgaacgtgt taacattaac attgtggcg attttcattt gaatgaagag
 1681 gttgccatca tttggcatc tttctgtct tctacaagt ctttattga cactataaag
 1741 agtcttgatt acaagcttt caaaaccatt gttgagtcct gcggaacta taaagttacc
 1801 aagggaagc ccgtaaaagg tcttggaac attggacaac agagatcagt ttaacacca
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 2461 cttaaaggc caaaagaagt aaccttctt gaagggtatt cacatgacac agtacttacc
 2521 tctgaggagg ttgttctcaa gaacgggtga ctcgaagcag tcgagacgcc cgttgatagc
 2581 ttcacaaatg gagctatcgt tggcacacca gtcgtgtaa atggcctcat gctcttagag
 2641 attaaaggaca aagaacaata ctgcgcatg tctcctggt tactggctac aaacaatgtc
 2701 tttcgcttaa aaggggggtc accaattaaa ggtgtaacct ttggagaaga tactgtttgg
 2761 gaagttcaag gttacaagaa tgtgagaac acatttgagc ttgatgaacg tttgacaaa
 2821 gtgcttaag aaaaagtctc tgtctacact gttgaatccg gtaccgaagt tactgagttt
 2881 gcatgtgtg tagcagaggc tttgtgaag actttacaac cagtttctga tctccttacc
 2941 aacatgggta ttgacttga tgagtgaggt gtagctacat tctacttatt tgatgatgct
 3001 ggtgaagaaa acttttcatc acgtatgtat tttcctttt accctccaga tgaggaagaa

FIGURE 8 B

3061 gaggacgatg cagagtgtga ggaagaagaa attgatgaaa cctgtgaaca tgagtacggt
3121 acagaggatg attatcaagg tctccctctg gaatttggtg cctcagctga aacagttcga
3181 gttgaggaag aagaagagga agactggctg gatgatacta ctgagcaatc agagattgag
3241 ccagaaccag aacctacacc tgaagaacca gttaatcagt ttactggtta tttaaaactt
3301 actgacaatg ttgccattaa atgtgttgac atcgtaagg aggcacaaag tgctaactct
3361 atggtgattg taaatgctgc taacatacac ctgaaacatg gtggtggtgt agcaggtgca
3421 ctcaacaagg caaccaatgg tgccatgcaa aaggagagtg atgattacat taagctaaat
3481 ggccctctta cagtaggagg gtctgtttg ctttctggac ataactctgc taagaagtgt
3541 ctgcatgttg ttggacctaa cctaaatgca ggtgaggaca tccagcttct taaggcagca
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3661 ggtgctaaac cacttcagtc ttacaagtg tgcgtgcaga cggttcgtac acaggtttat
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3781 aagcctagag tggaaagcacc taaacaagag gagccaccaa acacagaaga ttccaaaact
3841 gaggagaaat ctgtctgata gaagcctgic gatgtgaagc caaaaattaa ggcctgcatt
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3961 gctgataca atggtgaagt ttacctgat tctcagaaca tgcttagagg tgaagatatg
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4321 gaaatgcttg ctcatctga agagacaaga aaattaatgc ctatatgcat ggatgttaga
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4441 gactatggtg tccgattctt cttttact agtaaagagc ctgtagcttc tattattacg
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4561 tttatcttg aagaggctgc gcgctgatg cgttctcta aagctcctgc cgtagtgtca
4621 gtatcatcac cagatgctgt tactacatat aatggatacc tcacttcgtc atcaagaca
4681 tctgaggagc actttttaga aacagtttct ttggctggct cttacagaga ttgctctat
4741 tcaggacagc gtacagagti aggtgttgaa tttctaaagc gtggtgacaa aattgtgtac
4801 cacactctgg agagccccgt cgagtttcat ctgacggtg aggttcttc acttgacaaa
4861 ctaaagagtc tcttatccct gcgggaggtt aagactataa aagtgttcac aactgtggac
4921 aacactaatc tccacacaca gcttgtggat atgtctatga catatggaca gcagtttgg
4981 ccaacatact tggatggtgc tgatgttaca aaaattaac ctcatgtaa tcatgagggt
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5101 catactcttg atgagagttt tcttgtagg tacatgtctg ctttaacca cacaagaaa
5161 tggaaatttc ctcaagtgg tggtttaact tcaattaat gggctgataa caattgttat
5221 ttgtctagt ttttattagc acttcaacag ctggaagta aattcaatgc accagcatt
5281 caagaggctt attatagagc ccgtgctggt gatgctgcta acttttgtgc actcatactc
5341 gcttacagta ataaaactgt tggcgagctt ggtgatgtca gagaactat gacctatctt
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5461 ggtcagaaaa ctactacctt aacgggtgta gaagctgtga tgtatatggg tactctatct
5521 tatgataatc ttaagacagg tgtttccatt ccatgtgtgt gtggtcgtga tgctacaca
5581 tatctagtac aacaagagtc ttctttgtt atgatgtctg caccactgc tgagtataaa
5641 ttacagcaag gtacattctt atgtgcgaat gagtacactg gtaactatca gtgtgtcat
5701 tacactcata taactgctaa ggagaccctc tategtattg acggagctca ctttacaag
5761 atgtcagagt acaaaggacc agtgactgat gttttctaca aggaacatc ttactata
5821 accatcaagc ctgtgtcgt taaactcgat ggagttactt acacagagat tgaacaaaa
5881 ttggtgggtt attataaaaa ggataatgct tactatacag agcagcctat agacttgta
5941 ccaactcaac cattacaaa tgcgagtitt gataattca aactcacatg tttaacaca
6001 aaatttgctg atgatttaaa tcaaatgaca ggcttcaca agccagcttc acgagagcta
6061 tctgtcacat tcttccaga cttgaatggc gatgtagtgg ctattgacta tagacatat
6121 tcagcgagti tcaagaaagg tgctaaatta ctgcataagc caattgttg gcacattaac

FIGURE 8 C

6181 caggctacaa ccaagacaac gttcaaacca aacacttggt gttacgttg tctttggagt
6241 acaaagccag tagatacttc aaattcattt gaagttctgg cagtagaaga cacacaagga
6301 atggacaatc ttgcttgtga aagtcaacaa cccacctctg aagaagtagt ggaaaatcct
6361 accatacaga aggaagtcac agagtgtgac gtgaaaacta ccgaagttgt aggcaatgac
6421 atacttaaac catcagatga aggtgttaaa gtaacacaag agttagggtca tgaggatctt
6481 atggctgctt atgtggaaaa cacaagcatt accattaaga aacctaata gctttcacta
6541 gccctagggt taaaaacaat tggcactcat ggtattgtct caattaatag tgttccttgg
6601 agtaaaattt tggcttatgt caaaccattc ttaggacaag cagcaattac aacatcaaat
6661 tgcgctaaga gattagcaca acgtgtgttt aacaattata tgccttatgt gtttacatta
6721 ttgttccaat tgtgtacttt tactaaaagt accaatctta gaattagagc ttactacct
6781 acaactattg ctaaaaatag tgtaagagt gttgctaaat tatgtttgga tggcggcatt
6841 aattatgtga agtcacccaa attttctaaa ttgtcacaa tcgctatgtg gctattgttg
6901 ttaagtattt gcttaggttc tctaactgtg gtaactgtg cttttggtgt actcttatct
6961 aattttgggt ctccttcta ttgtaatggc gttagagaat tgatcttaa ttcgtctaac
7021 gttactacta tggatttctg tgaaggttct ttctcttga gcattgttt aagtggatta
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7141 ctgacttga caattttagg tctggccgct gagtgggttt tggcatatat gttgttcaca
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7261 agtcatttca tcagcaattc ttggctcatg tggttatca ttagtattgt acaaatggca
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7381 agctatgttc atatcatgga tggttgcacc tcttcgactt gcatgatgtg ctataagcgc
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7561 gacacatttt gcaactgtag tacattcatt agtgatgaag ttgctcgtga ttgtcactc
7621 cagttaaaaa gaccaatcaa cctactgac cagtcacgt atattgtga tagtgttgc
7681 gtgaaaaatg ggcgcttca cctctacttt gacaaggctg gtcaaaagac ctatgagaga
7741 catccgctct ccatattgt caatttagac aatttgagag ctaacaacac taaaggttca
7801 ctgcctatta atgtcatagt tttgatggc aagtccaaat gcgacgagtc tgccttaag
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8101 gctgccgac aagggttgtt gtataccgat gttgacaaa aggatgttat tgaatgtct
8161 aaactttac atcactctga cttagaagt acaggtgaca gttgtaaaa ttcatgctc
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8281 gcaaggcata tcaatgccc agtagcaaaa agtcacaat ttactcat ctggaatga
8341 aaagactaca tgtctttatc tgaacagctg cgtaaacaaa ttctagtgc tgccaagaag
8401 aacaacatac cttttagact aacttgtgt acaactagac aggttgtcaa tgcataact
8461 actaaaatct cactcaaggg tggtaagatt gtagtactt gtttaaaact tatgcttaag
8521 gccacattat tgtgcgttct tgtgcattg gttgttata tcttatgcc agtacataca
8581 ttgtcaatcc atgatgtta cacaatgaa atcattggtt acaaagccat tcaggatgtt
8641 gtcactcgtg acatcattc tactgatgat tgttttcaa ataacatgc tggttttgac
8701 gcatggttta gccagcgttg tggttcatac aaaaatgaca aaagctgccc ttagtagct
8761 gctatcatta caagagagat tggttcata gtgcctggtt taccgggtac tgtgtgaga
8821 gcaatcaatg gtgacttctt gcaatttcta cctcgtgtt ttagtctgt tggcaacatt
8881 tgcacacac ctccaact catlgagtat agtgatttg ctacctctgc ttgcgttct
8941 gctgctgagt gtacaatttt taaggatgct atgggcaaac ctgtgccata ttgttatgac
9001 actaatttgc tagagggttc tatttctat agtgagcttc gtccagacac tcttatgtg
9061 cttatggatg gttccatcat acagtttctt aacacttacc tggagggttc ttttagagta
9121 gtaacaactt ttgatgtga gtactgtaga catggtacat gcgaagggtc agaagtaggt
9181 atttgcctat ctaccagtg tagatgggtt ctaataatg agcattacag agctctatca
9241 ggagttttct gtggtgttga tgcgatgaat ctcatagcta acatctttac tctcttctg

FIGURE 8 D

9301 caacctgtgg gtgctttaga tgtgtctgct tcagtagtgg ctgggtggtat tattgccata
9361 ttgggtgactt gtgctgccta ctactttatg aaattcagac gtgttttgg tgagtacaac
9421 catgttgttg ctgctaagtc acttttgitt ttgatgtctt tcactatact ctgtctggta
9481 ccagcttaca gctttctgcc gggagtctac tcagtccttt acttgtactt gacattctat
9541 ttcaccaatg atgtttcatt ctgggtcac ctccaatggt ttgcatggt ttctcttatt
9601 gtgccttttt ggataacagc aatctatgta ttctgtattt ctctgaagca ctgccattgg
9661 ttcttaaca actatcttag gaaaagagtc atgttaatg gatttacatt tagtaccttc
9721 gaggaggctg ctttgtgtac cttttgctc aacaaggaaa tgtacctaaa attgcgtagc
9781 gagacactgt tgccacttac acagtataac aggtatcttg ctctatataa caagtacaag
9841 tatttcagtg gagccttaga tactaccagc tatcgtgaag cagcttgctg ccacttagca
9901 aaggctctaa atgactttag caactcaggt gctgatgttc tctaccaacc accacagaca
9961 tcaatcactt ctgctgttct gcagagtggg tttaggaaaa tggcattccc gtcaggcaaa
10021 gttgaagggt gcatgttaca agtaacctgt ggaactacaa ctctaatgg attgtggttg
10081 gatgacacag tatactgtcc aagacatgac attgcacag cagaagacat gcttaacct
10141 aactatgaag atctgtcat tcgcaaatcc aaccatagct ttctgttca ggctggcaat
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10261 acttctaacc ctaagacacc caagtataaa ttgtccgta tccaacctgg tcaaacattt
10321 tcagttctag catgctacaa tggttcacca tctggtgttt atcagtgtgc catgagacct
10381 aatcatacca ttaaagggtc ttctctaat ggatcatgtg gtagtgttg tttaacatt
10441 gattatgatt gcgtgtcttt ctgctatatg catcatatgg agctccaac aggagtacac
10501 gctggtactg acttagaagg taaattctat ggtccatttg ttgacagaca aactgcacag
10561 gctgcaggta cagacacaac cataacatta aatgttttgg catggctgta tgctgctgtt
10621 atcaatgggt ataggtgggt tcttaataga ttcaccacta ctttgaatga cttaacctt
10681 gtggcaatga agtacaacta tgaaccttg acacaagatc atgttgacat attgggacct
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10861 ccatttgatg ttgtagaca atgctctggt gttaccttcc aaggttaagt caagaaaatt
10921 gttaagggca ctatcattg gatgcttta actttcttga catcactatt gattctgtt
10981 caaagtacac agtggctact gttttctt gtttagaga atgctttctt gccatttact
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11101 ttgtgctgt ttctgttacc ttcttctgca acagttgctt actttaatat ggtctacatg
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11221 gggtatagc ttaaggattg tgttatgtat gcttcagctt tagttttgct tattctcatg
11281 acagctcgca ctgtttatga tgatgtgct agacgtgttt ggacactgat gaatgtcatt
11341 acactgttt acaaagtcta ctatggtaat gcttagatc aagctatttc catgtgggcc
11401 ttagtattt ctgtaacctc taactattct ggtgtcgtta cgactatcat gtttttagt
11461 agagctatag tgtttgtgtg tgttagtat tacccattgt tattttatc tggcaacacc
11521 ttacagtga tcatgctgt ttattgttc itaggctatt gttgctgctg ctactttggc
11581 cttttctgtt tactcaaccg ttacttcagg ctactcttg gtgtttatga ctacttgctc
11641 tctacacaag aatttaggta tatgaactcc caggggcttt tgccctctaa gagtagtatt
11701 gatgctttca agcttaacat taagtgttg ggtattggag gtaaacatg tatcaaggt
11761 gctactgtac agtctaaaat gctgacgta aagtgcacat ctgtgttact gctctcggtt
11821 cttaacaac tttagtaga gtcattctt aaattgtggg cacaatgtgt acaactccac
11881 aatgatattc ttctgcaaa agacacaact gaagcttctg agaagatggt ttctctttg
11941 tctgttttgc tatcatgca ggtgtgctga gacattaata ggtgtgctga ggaaatgctc
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12241 gcaagatctg aggacaagag ggcaaaagta actagtcta tgcaacaat gctcttcaat
12301 atgcttagga agcttgataa tgatgcactt aacaacatta tcaacaatgc gcgtgatggt
12361 tgtgttcac tcaacatcat accattgact acagcagcca aactcatggt tgtgtccct

FIGURE 8 E

12421 gattatggta cctacaagaa cacttgtgat ggtaacacct ttacatatgc atctgcactc
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12541 atggacaatt caccaaattt ggcttggcct cttattgta cagctctaag agccaactca
12601 gctgttaaac tacagaataa tgaactgagt ccagtagcac tacgacagat gtcctgtgcg
12661 gctggtacca cacaacacgc ttgtactgat gacaatgcac ttgcctacta taacaattcg
12721 aaggagagta gggttgtgct ggcttacta tcagaccacc aagatctcaa atgggctaga
12781 ttccctaaga gtgatgttac aggtacaatt tacacagaac tggaaccacc ttgtagggtt
12841 gttacagaca caccaaaagg gcctaaagtg aaatactgtt acttcatcaa aggcctaaac
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13021 cctgctaaag catataagga ttacctagca agtggaggac aaccaatcac caactgtgtg
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13141 atggaccaag agtccitttg tgggtcttca tgtgtctgt attgtatag ccacattgac
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13261 tgtgctaatag acccagtggg ttttactt agaaacacag tctgtaccgt ctgcggaatg
13321 tggaaagggt atggctgtag ttgtacca ctcgcgaac ccttgatgca gctgaggat
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13441 caggcactag tactgatgtc gtctacaggg cttttgatat ttacaacgaa aaagtgtctg
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13621 agactattta taacttggtt aaagattgtc cagcgggtgc tgtccatgac ttttcaagt
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13861 acttctaga gaactctgac atcttaccgc tatatgctaa cttaggtgag cgtgtacgcc
13921 aatcattatt aaagactgta caattctgc atgctatgcg tgatgcaggc attgtaggcg
13981 tactgacatt agataatcag gatctaatg ggaactggt cgtttcgggt gatttctgac
14041 aatgacacc aggtgcgga gttcctattg tggattcata ttactcattg ctgatccca
14101 tctcacttt gactagggca ttggctgctg agtcccatat ggatgctgat ctgcgaaaac
14161 cacttattaa gtgggatttg ctgaaatatg attttacgga agagagactt tgtctctcg
14221 accgttattt taaatattgg gaccagacat accatcccaa ttgtattaac tgttggatg
14281 ataggtgtat ccttcattgt gcaaacttta atgtgtatt ttctactgtg ttccacctt
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14401 ctggatacca ttttctgag ttaggagtcg tacataatca ggatgtaaac ttacatagct
14461 cgcgtctcag tttaaggaa cttttagtgt atgctgctga tccagctatg catgcagctt
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14581 atgttgcctt tcaaactgtc aaacccggtt attttaataa agactttat gactttgctg
14641 tgtctaaagg tttcttaag gaaggaggtt ctgtgaact aaaacacttc ttcttggctc
14701 aggatggcaa cgctgctatc agtgattatg actattatcg ttataatcg ccaacaatgt
14761 gtgatatcag acaactccta ttctagtgtg aagttgtga taaatacttt gattgttacg
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15061 gtactatgac aaatagacag ttatcaga aattattgaa gtcaatagcc gccactagag
15121 gagctactgt ggtaattgga acaagcaagt ttacgggtg ctggcataat atgttaaaaa
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15301 cttgctgtaa ctatcacac cgtttctaca ggtagctaa cgagtgtgag caagtattaa
15361 gtgagatggt catgtgtggc ggctcactat atgttaaac aggtggaaca tcatccgggtg
15421 atgctacaac tgcattatgt aatagtgtc ttacatttg tcaagctgtt acagccaatg
15481 taaatgcact tcttcaact gatggttaata agatagctga caagtatgtc cgcaatctac

FIGURE 8 F

15541 aacacaggct ctatgagtgt ctctatagaa atagggatgt tgatcatgaa ttcgtggatg
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15661 tgtgctataa cagtaactat gcggctcaag gtttagtagc tagcattaag aactttaagg
15721 cagttcttta ttatcaaaat aatgtgttca tgtctgaggc aaaatgttgg actgagactg
15781 acctactaa aggacctcac gaattttgct cacagcatac aatgctagtt aaacaaggag
15841 atgattacgt gtacctgcct taccagatc catcaagaat attaggcgca ggctgttttg
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16201 cticacttcg ttgcggtgcc tgtattagga gaccattcct atgttgcaag tgctgctatg
16261 accatgtcat ttcaatcaca cacaattag tgtgtctgt taatccctat gtttgcaatg
16321 ccccggttg tgatgtcact gatgtgacac aactgtatct aggaggtatg agctattatt
16381 gcaagtcaca taagctccc attagtcttc cattatgtgc taatggtcag gtttttggtt
16441 tataaaaaa cacatgtgta ggcagtgaca atgtcactga cttaaatgcg atagcaacat
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16561 ttttcgcagc agaaacgctc aaagccactg aggaacatt taagctgtca tatggtattg
16621 ccaactgacg cgaagtactc tctgacagag aattgcatct ttcatgggag gttggaaaac
16681 ctgaccacc attgaacaga aactatgtct ttactggta ccgtgtaact aaaaatagta
16741 aagtacagat tggagagtac accttgaaa aagggtgacta tgggtatgct gttgtgtaca
16801 gaggtactac gacatacaag ttgaatgttg gtgattactt tgtgtgaca tctcacactg
16861 taatgccact tagtgacct actctagtc cacaagagca ctatgtgaga attactggct
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16981 tcggcatgca aaagtactc acactccaag gaccactgg tactggtaag agtcattttg
17041 ccatcggact tgcctctat taccatctg ctgcgatagt gtatacgga tgcctcatg
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17161 gaatcatacc tgcgctgcg cgctagagt gtttgataa attcaaagt aattcaacac
17221 tagaacagta tgtttctgc actgtaaatg cattgccaga aacaactgct gacattgtag
17281 tctttgatga aatctctatg gctactaatt atgacttgag tgttgtaact gctagacttc
17341 gtgcaaaaca ctactctat attggcgatc ctgctcaatt accagcccc cgcacattgc
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17581 tcaaaatgtt ctacaaagg gttattacac atgatgttct atctgcaatc aacagacctc
17641 aaataggcgt tgtaagagaa ttcttacac gcaatcctgc ttggagaaaa gctgttttta
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18121 accgtagact catctctatg atgggttca aatgaatta ccaagtcaat gggtacccta
18181 atatgtttat caccgcgaa gaagctattc gtcacgttcg tgcgtggatt ggctttgatg
18241 tagagggtcg tcatgcaact agagatgctg tgggtactaa cctacctc cagctaggat
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18361 cagaattcac cagagtta gcaaacctc caccagggtga ccagttttaa catcttatac
18421 cactcatgta taaaggctt ccctggaatg tagtgctat taagatagta caaatgtca
18481 gtgatacat gaaaggattg tcagacagag tctgttctgt cctttgggcg catggctttg
18541 agcttacatc aatgaagtac ttgtcaaga ttggacctga aagaactgt tgtctgtgtg
18601 acaaacgtgc aactgtctt tctacttcat cagatactta tgcctgctgg aatcattctg

FIGURE 8 G

18661 tgggttttga ctatgtctat aaccattta tgattgatgt tcagcagtgg ggctttacgg
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18781 gttgtgatgc tatcatgact agatgttttag cagtccatga gtgctttgtt aagcgcgttg
18841 attggtctgt tgaataacctt attataggag atgaactgag ggtaattct gcttcagaa
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18961 acattggaaa tccaaaggct atcaagtgtg tgcctcaggc tgaagtagaa tggaagttct
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19081 ctacacatca cgataaattc actgatgggtg tttgtttgtt ttggaattgt aacgttgatc
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19381 ctacgtgtat tacacgatgc aatttaggtg gtgctgtttg cagacaccat gcaaagtgt
19441 accgacagta cttggatgca tataatatga tgatttctgc tggatttagc ctatggattt
19501 acaacaatt tgatacttat aacctgtgga atacattac caggttacag agtttagaaa
19561 atgtggctta taatgttgtt aataaaggac actttgatgg acacgccggc gaagcacctg
19621 ttccatcat taataatgct gttacacaa aggtagatgg tattgatgtg gagatcttg
19681 aaaataagac aacacttctt gttaatgttg catttagctt ttgggctaag cgtaacatta
19741 aaccagtgcc agagattaag atactcaata atttgggtgt tgatctgct gctaatactg
19801 taatctggga ctacaaaaga gaagcccag cacatgtatc tacaataggt gtctgcacaa
19861 tgactgacat tgccaagaaa cctactgaga gtgctgttc ttacttact gtctgtttg
19921 atggttaggt ggaaggacag gtagaccttt ttgaaacgc ccgtaattgt gtttaataa
19981 cagaaggctc agtcaaaggc ctacacctt caaaggacc agcacaagct agcgtcaatg
20041 gagtcacatt aattggagaa tcagtaaaaa cacagttaa ctactttaag aaagtagacg
20101 gcattatca acagtgcct gaaacctact ttactcagag cagagactta gaggatttta
20161 agcccagatc acaaatggaa actgacttcc tggagctgc tatggatgaa ttcatacagc
20221 gatataagct cgagggtctat gccttcgaac acatcgttta tggagatttc agtcatggac
20281 aacttggcgg tcttctatta atgataggct tagccaagcg ctacaagat tcaccactta
20341 aattagagga tttttacct atggacagca cagtgaataa ttacttata acagatgcgc
20401 aaacaggctc atcaaatgt gtgtgtctg tgattgatct ttacttgat gactttgtcg
20461 agataataaa gtcacaagat ttgtcagtga ttcaaaaagt ggtaagggtt acaattgact
20521 atgctgaaat ttacttcatg ctttgggtga aggatggaca tgttgaaacc ttctacccaa
20581 aactacaagc aagtcaagcg tggcaaccag gtgttcgat gcctaacttg tacaagatgc
20641 aaagaatgct tcttgaaga gtgaccttc agaattatgg tgaatgct gttataccaa
20701 aaggataat gatgaatgc gcaaagtata ctcaactgtg tcaatactta aatacactta
20761 ctttagctgt accctacaac atgagagtta ttactttgg tgctggctct gataaaggag
20821 ttgaccagg tacagctgtg ctacagaaat ggttgccaac tggcacacta cttgtcgatt
20881 cagatcttaa tgacttcgtc tccgacgcag atttacttt aattggagac tgtgcaacag
20941 tacatacggc taataaatgg gaccttatta ttacgatat gtatgacctt aggaccaaac
21001 atgtgacaaa agagaatgac tctaaagaag ggtttttcac ttatctgtgt ggatttataa
21061 agcaaaaact agccctgggt ggttctatag ctgtaaatg aacagagcat tcttggaaatg
21121 ctgaccttta caagcttatg ggccatttct catggtggac agcttttgtt acaaatgtaa
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21241 aaattgatgg ctataccatg catgctaact acattttctg gaggaacaca aatcctatcc
21301 agttgtcttc ctattcactc ttgacatga gcaaatttcc tcttaataa agaggaactg
21361 ctgtaatgtc tcttaaggag aatcaaatca atgatgatg ttattctctt ctggaaaaag
21421 gtaggcttat cattagagaa aacaacagag ttgtggttc aagtgatatt cttgtaaca
21481 actaaacgaa catgtttatt tcttattat tcttactct cactagtgtt agtgacctg
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21661 atttatttct tccattttat tctaattgta cagggtttca tactattaat catacgtttg
21721 gcaaccctgt catacctttt aaggatggta tttattttgc tgccacagag aaatcaaatg

FIGURE 8 H

21781 ttgtccgtgg ttgggtttt gggtctacca tgaacaacaa gtcacagtcg gtgattatta
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21901 tctttgtctg ttctaaccac atgggtacac agacacatac tatgatattc gataatgcat
21961 ttaattgcac ttctgagtag atactgtatg ccttttcgct tgatgtttca gaaaagtcag
22021 gtaattttaa acacttacga gagtttgtgt ttaaaaaata agatgggttt ctctatgttt
22081 ataagggcta tcaacctata gatgtagttc gtgatctacc ttctggtttt aacactttga
22141 aacctatttt taagtgcct ctgggtatta acattacaaa ttttagagcc attcttacag
22201 ccttttcacc tgctcaagac atttggggca cgtcagctgc agcctatttt gtggctatt
22261 taaagccaac tacatttatg ctcaagtatg atgaaaatgg tacaacaca gatgctgttg
22321 attgtttcga aaatccactt gctgaactca aatgctctgt taagagcttt gagattgaca
22381 aaggaattta ccagacctct aatttcaggg ttgtccctc aggagatgtt gtgagattcc
22441 ctaattattc aaacttgtgt ccttttgagg aggtttttaa tgctactaaa ttcccttctg
22501 tctatgcatg ggagagaaaa aaaatttcta attgtgttgc tgattactct gtgctctaca
22561 actcaacatt ttttcaacc tttaagtgt atggcggttc tgccactaag ttgaatgac
22621 ttgtcttc caatgtctat gcagattctt ttgtagtcaa gggagatgat gtaagacaaa
22681 tagcgccagg acaactgtgt gttattgctg attataatta taaattgcca gatgattca
22741 tgggttgtgt ccttgcttgg aatactagga acattgatgc tacttcaact ggtaattata
22801 attataata taggtatctt agacatggca agcttaggcc ctttgagaga gacatatcta
22861 atgtgccttt cccccgtat ggcaaacctt gcacccacc tgctttaat tgtattggc
22921 cattaatga ttatggtttt tacaccacta ctggcattgg ctaccaacct tacagagttg
22981 tagtacttcc tttgaactt taaatgcac cggccacggt ttgtggacca aaattatcca
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23101 tgttaactcc ttcttcaag agatttcaac catttcaaca atttggccgt gatgtttctg
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23221 cttttggggg tgtaagtgtg attacacctg gaacaaatgc ttcatctgaa gttgctgttc
23281 tatatcaaga tgtaactgc actgatgttt ctacagcaat tcatgcagat caactcacac
23341 cagcttgctg catatattct actggaaaca atgtattcca gactcaagca ggctgtctta
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23461 gtgctagtta ccatacagtt tctttattac gtagtactag ccaaaaatct atttggctt
23521 atactatgtc tttaggtgct gatagtcaa ttgcttactc taataacacc attgctatac
23581 ctactaactt tcaattagc attactacag aagtaatgcc tgtttctatg gctaaaacct
23641 ccgtagattg taatatgtac atctgaggag atttactga atgtgctaatt ttgcttctcc
23701 aatatgtag cttttgcaca caactaaac gtgcactctc aggtattgct gctgaacagg
23761 atcgcaacac acgtgaagtg ttgctcaag tcaacaatat gtacaaaacc ccaactttga
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23881 ggtcttttat tgaggacttg ctcttataa aggtgacact cgctgatgtt ggcttcatga
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24181 ttctctatga gaacaaaaa caaatgccca accaatttaa caaggcgatt agtcaaatc
24241 aagaatcact tacaacaaca tcaactgcat tgggcaagct gcaagacgtt gtaaccaga
24301 atgctcaagc attaaacaca ctgttaaac aacttagctc taattttggt gcaatttcaa
24361 gtgtgctaaa tgatatcctt tcgcgacttg ataaagtga ggccggaggta caaattgaca
24421 ggtaattac aggcagactt caaagccttc aaacctatgt aacacaaca ctaatcaggg
24481 ctgctgaaat cagggtctct gctaactttg ctgctactaa aatgtctgag tgtgttcttg
24541 gacaatcaaa aagagttgac tttgtggaa agggctacca cttatgtcc ttcccacaag
24601 cagccccgca tgggtgtgtc ttctacatg tcacgtatgt gccatcccag gagaggaact
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24721 ttgtgtttaa tggcacttct tggtttatta cacagaggaa ctcttttct ccacaataa
24781 ttactacaga caatacattt gtctcaggaa attgtgatgt cgttattggc atcattaaca
24841 acacagtta tgatcctctg caacctgagc ttgactcatt caaagaagag ctggacaagt

FIGURE 8 I

24901 acttcaaaaa tcatacatca ccagatgttg atcttggcga catttcaggc attaacgctt
24961 ctgtcgtcaa cattcaaaaa gaaattgacc gcctcaatga ggctcgctaaa aatttaaatg
25021 aatcactcat tgaccttcaa gaattgggaa aatatgagca atatattaaa tggccttggt
25081 atgtttggct cggcttcatt gctggactaa ttgccatcgt catggttaca atcttgcttt
25141 gttgcatgac tagttgttgc agttgcctca aggggtgcatg ctcttggtgt tcttgctgca
25201 agtttgatga ggatgactct gagccagttc tcaagggtgt caaattacat tacacataaa
25261 cgaacttatg gatttgttta tgagattttt tactcttaga tcaattactg cacagccagt
25321 aaaaattgac aatgcttctc ctgcaagtac tgttcagtct acagcaacga taccgctaca
25381 agcctcactc cctttcggat ggcttggtat tggcgttgca ttcttgctg ttttcagag
25441 cgctacccaaa ataattgcgc tcaataaaaag atggcagcta gccctttata agggcttcca
25501 gttcatttgc aatttactgc tgctatttgt taccatctat tcacatcttt tgcttgctgc
25561 tgcaggatg gaggcgcaat tttgtacct ctatgccttg atatatttc tacaatgcat
25621 caacgcatgt agaattatta tgagatgttg gcttgttggt aagtgcgaat ccaagaaccc
25681 attactttat gatgccaaact acttgtttg ctggcacaca cataactatg actactgtat
25741 accatataac agtgcacag atacaattgt cgttactgaa ggtgacggca ttcaacacc
25801 aaaactcaaa gaagactacc aaattgggtg ttattctgag gataggcact caggtgttaa
25861 agactatgct gttgtacatg gctatttcac cgaagttaac taccagcttg agtctacaca
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25981 agaccaccg aatgtgcaaa tacacacaat cgacggctct tcaggagtig ctaatccagc
26041 aatggatcca atttatgatg agccgacgac gactactagc gtgcctttgt aagcacaaga
26101 aagtgagtac gaacttatgt actcattcgt ttccgaagaa acaggtacgt taatagttaa
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26281 ggttacgtc tactcgcgtg ttaaaaatct gaacicttct gaaggagttc ctgatctct
26341 ggtctaaacg aactaactat tattattatt ctgtttggaa cttaacatt gcttatcatg
26401 gcagacaacg gtactattac cgttgaggag cttaacaac tcctggaaca atggaacctt
26461 gtaatagggt tcctattcct agcctggatt atgttactac aattgccta ttctaactgg
26521 aacaggtttt tgacataat aaagcttgtt ttctctggc tcttggtggc agtaacactt
26581 gcttgttttg tgcttgctgc tgctacaga attaatggg tgactggcgg gattgcgatt
26641 gcaatggctt gtattgtagg ctgtatgttg cttagctact tegtgtctc cttcaggctg
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26941 gcgtcgacg gtgtaggcac tgattcaggt ttgtctcat acaaccgta ccgtattgga
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27181 agtgagacaa ttatttaagc cttaactaa gaagaattat tcggagttag atgatgaaga
27241 acctatggag ttgattatc cataaaacga acatgaaaat tattctcttc ctgacattga
27301 ttgtatttac atctgcgag ctatatcact atcaggagtg tgttagaggt acgactgtac
27361 tactaaaaga acctgcccc tcaggaacat acgagggcaa ttaccattt caccctctg
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27541 aagaggaggt tcaacaagag ctctactcgc cacttttct cattgttct gctctagtat
27601 ttttaact ttgcttacc attaagagaa agacagaatg aatgagctca cttaattga
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27721 ttggtttca ctcgaaatcc aggatctaga agaacttgt accaaagtct aaacgaacat
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27841 gcgtgtgca tctaataaac ctcatgtgt tgaagatcct tgaaggtag aacactaggg
27901 gtaatactta tagcactgct tggctttgt ctctaggaaa ggttttacct ttcatagat
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FIGURE 8 J

28021 gtggtgcgct tatagctagg tgttggtacc ttcataagg tcacaaact gctgcattha
28081 gagacgtact tgttgtttta aataaacgaa caaattaaaa tgtctgataa tggaccccaa
28141 tcaaaccaac gtagtgcccc ccgcattaca ttggtggac ccacagattc aactgacaat
28201 aaccagaatg gaggacgcaa tggggcaagg ccaaacagc gccgaccca aggtttacc
28261 aataatactg cgtcttggtt cacagctctc actcagcatg gcaaggagga acttagattc
28321 cctcgaggcc agggcggtcc aatcaacacc aatagtggc cagatgacca aattggctac
28381 taccgaagag ctaccgacg agttcgtgtt ggtgacggca aaatgaaaga gtcagcccc
28441 agatggtact tctattacct aggaactggc ccagaagctt cacttccta cggcgctaac
28501 aaagaaggca tcgtatgggt tgcaactgag ggagcctga atacaccaa agaccacatt
28561 ggcacccgca atcctaataa caatgctgcc accgtgctac aattcctca aggaacaaca
28621 ttgcaaaaag gcttctacgc agagggaagc agaggcgga gtcaagcctc ttctcgtcc
28681 tcatacgtg gtgcggttaa ttcaagaaat tcaactcctg gcagcagtag gggaaattct
28741 cctgctcgaa tggctagcgg aggtgtgtga actgccctcg cgctattgct gctagacaga
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28861 actaagaaat ctgctgctga ggcactctaa aagcctcgcc aaaaacgtac tgccacaaa
28921 cagtacaacg tcactcaagc atttgggaga cgtggtccag aacaaacca aggaaatttc
28981 ggggaccaag acctaactag acaaggaact gattacaaac attggccgca aattgcacaa
29041 ttgtctcaa gtgcctctgc attctttgga atgtcacgca ttggcatgga agtcacacct
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29161 aaagacaacg tcatactgct gaacaagcac attgacgcat acaaacatt cccaccaaca
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29281 aagaagcagc ccactgtgac tcttctcct gcggctgaca tggatgatti ctccagacaa
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29401 accacacaag gcagatgggc tatgtaaacg tttcgaat tccgtttacg atacatagtc
29461 tactcttggt cagaatgaat tctcgtact aaacagcaca agtaggttta gttacttta
29521 atctcacata gcaatcttta atcaatgtgt aacattaggg aggactgaa agagccacca
29581 cattttcattc gaggccacgc ggagtacgat cgagggtaca gtgaataatg ctagggagag
29641 ctgcctatat ggaagagccc taatgtgtaa aattaatttt agtagtgcta tccccatgtg
29701 attttaatag ctcttagga gaatgacaaa aaaaaaaaaa aaaaaaaaaa a

FIGURE 9A

1	ctacccagga	aaagccaacc	aacctcgatc	tctttagat	ctgttctcta	aacgaacttt
61	aaaatctgtg	tagctgtcgc	tcggctgcat	gcctagtgc	cctacgcagt	ataaacaata
121	ataaatttta	ctgtcgttga	caagaaacga	gtaactcgtc	cctcttctgc	agactgctta
181	cggtttcgtc	cgtgttgag	tcgatcatca	gcatacctag	gtttcgtccg	gggtgtgaccg
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301	ttgcctgtcc	ttcagggttag	agacgtgcta	gtgcgtggct	tcggggactc	tgtggaagag
361	gccctatcgg	aggcacgtga	acacctcaaa	aatggcactt	gtggcttagt	agagctggaa
421	aaaggcgtag	tgccccagct	tgaacagccc	tatgtgttca	ttaaacgttc	tgatgcctta
481	agcaccaatc	acggccacaa	ggtcgttgag	ctgggtgag	aaatggacgg	cattcagtag
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661	atcgatctaa	agtcttatga	cttaggtgac	gagcttggca	ctgatcccat	tgaagattat
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781	aatggaggtg	cagtcactcg	ctatgtcgac	aacaatttct	gtggcccgag	tgggtacctt
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901	caacttgatt	acatcgagtc	gaagagaggt	gtctactgct	gccgtgacca	tgagcatgaa
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1441	cgcaaggagg	gtaggactag	atgttttgga	ggctgtgtgt	ttgcctatgt	tggctgctat
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1561	attactgggtg	acaatgtgga	gaccttgaa	gaggatctcc	ttgagatact	gagtcgtgaa
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1921	tcaattcctg	atttgcaaa	agcagctgtc	accatacttg	atggtatttc	tgaacagtca
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2041	atggcatatg	taactggtgg	tcttgtaaaa	cagacttctc	agtgggtgtc	taatcttttg
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2341	gcaaagtgtc	gatcactcaa	cttaggtgaa	gtcttcatcg	ctcaaagcaa	gggactttac
2401	cgtcagtgtg	tacgtggcaa	ggagcagctg	caactactca	tgccctctaa	ggcaccacaa
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2521	ctcaagaacg	gtgaactcga	agcactcgag	acgcccgttg	atagcttcac	aaatggagct
2581	atcgttggca	caccagtctg	tgtaaatggc	ctcatgctct	tagagattaa	ggacaaagaa
2641	caatactgcg	cattgtctcc	tgggttactg	gtacaaaaca	atgtctttcg	cttaaaaggg
2701	ggtgcaccaa	ttaaaggtgt	aaccttttga	gaagatactg	tttgggaagt	tcaaggttac
2761	agaatgtga	gaatcacatt	tgagcttgat	gaacgtgttg	acaaagtgtc	taatgaaaag
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3061	tgtgaggaag	aagaaattga	tgaaccctgt	gaacatgagt	acggtacaga	ggatgattat
3121	caaggtctcc	ctctggaatt	tgggtgcctca	gctgaaacag	ttcgagtgtg	ggaagaagaa
3181	gaggaagact	ggctggatga	tactactgag	caatcagaga	ttgagccaga	accagaacct
3241	acacctgaag	aaccagttaa	tcagtttact	ggttatttaa	aacttactga	caatgttgcc
3301	attaaatgtg	ttgacatcgt	taaggaggca	caaagtgtca	atcctatggt	gattgtaaat
3361	gctgctaaca	tacacctgaa	acatggtggt	ggtgtagcag	gtgcactcaa	caaggcaacc
3421	aatggtgcca	tgcaaaagga	gagtgtgat	tacattaagc	taaatggccc	tcttacagta
3481	ggagggtctt	gtttgctttc	tggacataat	cttgctaaga	agtgtctgca	tggtgttgga
3541	cctaacctaa	atgcaggtga	ggacatccag	cttcttaagg	cagcatatga	aaatttcaat
3601	tcacaggaca	tcttacttgc	accattgttg	tcagcaggca	tatttgggtgc	taaaccactt

FIGURE 9B

3661	cagtcttttac	aagtgtgcgt	gcagacgggt	cgtacacagg	tttatattgc	agtcaatgac
3721	aaagctcttt	atgagcaggt	tgtcatggat	tatcttgata	acctgaagcc	tagagtggaa
3781	gcacctaaac	aagaggagcc	accaaacaca	gaagattcca	aaactgagga	gaaatctgtc
3841	gtacagaagc	ctgtcgatgt	gaagccaaaa	attaaggcct	gcattgatga	ggttaccaca
3901	acactggaag	aaactaagtt	tcttaccaat	aagttactct	tgtttgctga	tatcaatggg
3961	aagctttacc	atgattctca	gaacatgctt	agagggtgaag	atatgtcttt	ccttgagaag
4021	gatgcacctt	acatggtagg	tgatgtttatc	actagtgggtg	atatcacttg	tggttgaata
4081	ccctccaaaa	aggctgggtg	cactactgag	atgctctcaa	gagctttgaa	gaaagtgcc
4141	gttgatgagt	atataaccac	gtaccctgga	caaggatgtg	ctggttatac	acttgaggaa
4201	gctaagactg	ctcttaagaa	atgcaaatct	gcattttatg	tactaccttc	agaagcaoct
4261	aatgctaagg	aagagattct	aggaactgta	tcctggaatt	tgagagaaat	gcttgctcat
4321	gctgaagaga	caagaaaatt	aatgcctata	tgcatggatg	ttagagccat	aatggcaacc
4381	atccaacgta	agtataaagg	aattaaaatt	caagagggca	tcgttgacta	tggtgtccga
4441	ttcttctttt	atactagtaa	agagcctgta	gcttctatta	ttacgaagct	gaactctcta
4501	aatgagccgc	ttgtcacaat	gccaatgggt	tatgtgacac	atggttttaa	tcttgaagag
4561	gctgcgcgct	gtatgcgttc	tcttaaagct	cctgccgtag	tgtagtatc	atcaccagat
4621	gctgttacta	catataatgg	atacctcact	tcgtcatcaa	agacatctga	ggagcacttt
4681	gtagaaacag	tttctttggc	tggtctcttac	agagattggg	cctattcagg	acagcgtaca
4741	gagttaggtg	ttgaattttct	taagcgtggg	gacaaaattg	tgtaccacac	tctggagagc
4801	cccgtcgagt	ttcatcttga	cgggtgaggtt	ctttcacttg	acaaactaaa	gagtccttta
4861	ttcctgcggg	agggttaagac	tataaaagtg	ttcacaactg	tggaacaacac	taactctccac
4921	acacagacttg	tggtatgtc	tatgacatat	ggacagcagt	ttggtccaac	atactgggat
4981	gggtgctgatg	ttacaaaaat	taaacctcat	gtaaatcatg	agggtaagac	tttctttgta
5041	ctacctagtg	atgacacact	acgtagtga	gctttcgagt	actaccatac	tcttgatgag
5101	agttttcttg	gtaggtacat	gtctgcttta	aaccacacaa	agaaatggaa	atttctcaa
5161	gttgggtgggt	taacttcaat	taaatgggct	gataacaatt	gttatttgtc	tagtggttta
5221	ttagcacttc	aacagcttga	agtcacaattc	atgacaccag	cacttcaaga	ggcttattat
5281	agagcccgtg	ctgggtgatgc	tgctaaacttt	tgtgcactca	tactcgctta	cagtaataaa
5341	actgttgggcg	agcttgggtga	tgtcagagaa	actatgaccc	atcttctaca	gcattgcta
5401	ttggaatctg	caaagcgagt	tcttaatgtg	gtgtgtaaac	attgtgggtca	gaaaactact
5461	accttaacgg	gtgtagaagc	tggtgatgat	atgggtactc	tatcttatga	taatcttaag
5521	acaggtgttt	ccattccatg	tgtgtgtggg	cgtgatgcta	cacaatatct	agtacaacaa
5581	gagtccttct	ttgttatgat	gtctgcacca	cctgctgagt	ataaattaca	gcaaggtaca
5641	ttcttatgtg	cgaatgagta	cactggtaac	tatcagtgtg	gtcattacac	tcatataact
5701	gctaaggaga	ccctctatcg	tattgacgga	gctcacctta	caaagatgtc	agagtacaaa
5761	ggaccagtga	ctgatgtttt	ctacaaggaa	acatcttaca	ctacaaccat	caagcctgtg
5821	tcgtataaac	tcgatggagt	tacttacaca	gagattgaac	caaaattgga	tggttattat
5881	aaaaaggata	atgcttacta	tacagagcag	cctatagacc	ttgtaccaac	tcaaccatta
5941	ccaaatgcga	gttttgataa	tttcaaactc	acatgttcta	acacaaaatt	tgctgatgat
6001	ttaaatcaaa	tgacaggctt	cacaaagcca	gcttcacgag	agctatctgt	cacattcttc
6061	ccagacttga	atggcgatgt	agtggctatt	gactatagac	actattcagc	gagtttcaag
6121	aaaggtgcta	aattactgca	taagccaatt	gtttggcaca	ttaaccaggc	tacaaccaag
6181	acaacgttca	aaccaaacac	ttggtgttta	cggtgtcttt	ggagtacaaa	gccagtagat
6241	acttcaaatt	catttgaagt	tctggcagta	gaagacacac	aaggaatgga	caatcttgct
6301	tgtgaaagtc	aacaaccac	ctctgaagaa	gtagtggaaa	atcctaccat	acagaaggaa
6361	gtcatagagt	gtgacgtgaa	aactaccgaa	gttgtaggca	atgtcatact	taaaccatca
6421	gatgaagggtg	ttaaagtaac	acaagagtta	gggtcatgagg	atcttatggc	tgcttatgtg
6481	gaaaacacaa	gcattaccat	taagaaacct	aatgagcttt	cactagcctt	aggtttaaaa
6541	acaattgcca	ctcatgggat	tgctgcaatt	aatagtgttc	cttgaggtaa	aattttggct
6601	tatgtcaaac	cattcttagg	acaagcagca	attacaacat	caaattgcgc	taagagatta
6661	gcacaacgtg	tgtttaacaa	ttatatgcct	tatgtgttta	cattatttgtt	ccaatttgtgt
6721	acttttacta	aaagtaccaa	ttctagaatt	agagcttcac	tacctacaac	tatttgtaaa
6781	aatagtgtta	agagtgttgc	taaattatgt	ttggatgccg	gcattaatta	tgtgaagtca
6841	cccaaatttt	ctaaattgtt	cacaatcgct	atgtggctat	tggtgttaag	tatttgctta
6901	ggttctctaa	tctgtgtaac	tgtgtctttt	gggtgactct	tatctaattt	tggtgtcct
6961	tcttattgta	atggcggttag	agaattgtat	cttaattcgt	ctaacgttac	tactatggat
7021	ttctgtgaag	gttcttttcc	ttgcagcatt	tgtttaagtg	gattagactc	ccttgattct
7081	tatcgcgtc	ttgaaaccat	tcaggtgacg	atttcatcgt	acaagctaga	cttgacaatt
7141	ttaggtctgg	ccgctgagtg	ggttttggca	tatatgttgt	tcacaaaatt	cttttattta
7201	ttaggtcttt	cagctataat	gcaggtgttc	tttggtctatt	ttgctagtca	tttcatcagc
7261	aattcttggc	tcatgtggtt	tatcattagt	attgtacaaa	tgccaccctg	ttctgcaatg
7321	gttaggatgt	acatcttctt	tgtctcttct	tactacatat	ggaagagcta	tgttcatatc

FIGURE 9C

7381	atggatgggt	gcacctcttc	gacttgcatg	atgtgctata	agcgcaatcg	tgccacacgc
7441	gttgagtgt	caactattgt	taatggcatg	aagagatctt	tctatgtcta	tgcaaatgga
7501	ggccgtggct	tctgcaagac	tcacaattgg	aattgtctca	attgtgacac	atcttgcaat
7561	ggtagtacat	tcattagtga	tgaagttgct	cgtgatttgt	cactccagtt	taaaagacca
7621	atcaacccta	ctgaccagtc	atcgtatatt	gttgatagtg	ttgctgtgaa	aaatggcgcg
7681	cttcacctct	actttgacaa	ggctgggtcaa	aagacctatg	agagacatcc	tctctcccat
7741	tttgtcaatt	tagacaattt	gagagctaac	aacactaaag	gttcactgco	tattaatgtc
7801	atagtttttg	atggcaagtc	caaactgcgc	gagctctgct	ctaagtctgc	ttctgtgtac
7861	tacagtcagc	tgatgtgcc	acctattctg	ttgcttgacc	aagctcttgt	atcagacgtt
7921	ggagatagta	ctgaagtttc	cgtaagatg	tttgatgctt	atgtcgacac	cttttcagca
7981	acttttagtg	ttcctatgga	aaaacttaag	gcacttggtg	ctacagctca	cagcgagtta
8041	gcaaaggggtg	tagcttttaga	tggtgtcctt	tctacattcg	tgtcagctgc	ccgacaaggt
8101	gttggtgata	ccgatgttga	cacaaaggat	gttattgaat	gtctcaaact	ttcacatcac
8161	tctgacttag	aagtgcagag	tgacagttgt	aacaatttca	tgctcaccta	taataaggtt
8221	gaaaacatga	cgcccagaga	tcttggcgca	tgtattgact	gtaatgcaag	gcataatcaat
8281	gccaagtag	caaaaagtca	caatgtttca	ctcatctgga	atgtaaaaga	ctacatgtct
8341	ttatctgaac	agctgcgtaa	acaaattcgt	agtgtctgcca	agaagaacaa	catacctttt
8401	agactaactt	gtgctacaac	tagacaggtt	gtcaatgtca	taactactaa	aatctcactc
8461	aagggtggta	agattgttag	tacttgtttt	aaacttatgc	ttaaggccac	attattgtgc
8521	gttcttgctg	cattggtttg	ttatatcggt	atgccagtac	atacattgtc	aatccatgat
8581	ggttacacaa	atgaaatcat	tggttacaaa	gccattcagg	atgggtgcac	ctgtgacatc
8641	atcttactctg	atgattgttt	tgcaataaaa	catgctgggt	ttgacgcacg	gttttagccag
8701	cgtgggtgggt	catacaaaaa	tgacaaaagc	tgccctgtag	tagctgctat	cattacaaga
8761	gagattgggt	tcatagtgcc	tggttaccg	ggtagctgtc	tgagagcaat	caatgggtgac
8821	ttcttgcat	ttctacctcg	tggttttagt	gctgttgcca	acatttgcta	cacaccttcc
8881	aaactcattg	agtatagtga	ttttgctacc	tctgcttgcg	ttcttgctgc	tgagtgtaca
8941	atcttttaagg	atgctatggg	caaactctgt	ccatattggt	atgacactaa	tttgtagag
9001	ggttctatatt	cttatagtga	gcttcgtcca	gacactcggt	atgtgcttat	ggatgggttcc
9061	atcatacagt	ttcctaacac	ttacctggag	ggttctgtta	gagtagtaac	aacttttgat
9121	gctgagtact	gtagacatgg	tacatgcgaa	aggtcagaag	taggtatttg	cctatctacc
9181	agtggtagat	gggttcttaa	taatgagcat	tacagagctc	tatcaggagt	tttctgtggg
9241	gttgatgcga	tgaatctcat	agctaacatc	tttactcctc	ttgtgcaacc	tgtgggtgct
9301	tttagattgt	ctgcttcagt	agtggctggg	ggattatttg	ccatattggt	gacttgtgct
9361	gcctactact	ttatgaaatt	cagactgctt	tttggtgagt	acaacctagt	tgttgctgct
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9541	tcattcttgg	ctcaccttca	atgggttgcc	atgttttctc	ctattgtgcc	tttttgata
9601	acagcaatct	atgtattctg	tatttctctg	aagcactgcc	attgggttctt	taacaactat
9661	cttaggaaaa	gagtcatggt	taatggagtt	acatttagta	ccttcgagga	gggtgctttg
9721	tgtacctttt	tgctcaacaa	ggaaatgtac	ctaaaattgc	gtagcgagac	actgttgcca
9781	cttacacagt	ataacaggta	tcttgctcta	tataacaagt	acaagtattt	cagtggagcc
9841	ttagatacta	ccagctatcg	tgaagcagct	tgctgccact	tagcaaaggc	tctaaatgac
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9961	gttctgcaga	gtgggttttag	gaaaatggca	ttcccgtcag	gcaaagttga	aggggtgcac
10021	gtacaagtaa	cctgtggaac	tacaactctt	aatggattgt	ggttggatga	cacagtatac
10081	tgtccaagac	atgtcatttg	cacagcagaa	gacatgctta	atcctaacta	tgaagatctg
10141	ctcattcgca	aatccaacca	tagctttctt	gttcaggctg	gcaatgttca	acttcgtggt
10201	attggccatt	ctatgcaaaa	ttgtctgctt	aggcttaaag	ttgatacttc	taaccttaag
10261	acacccaagt	ataaatttgt	ccgtatccaa	cctgggtcaa	cattttcagt	tctagcatgc
10321	tacaatgggt	caccatctgg	tgtttatcag	tgtgccatga	gacctaatca	taccattaaa
10381	ggttctttcc	ttaatggatc	atgtggtagt	gttggtttta	acattgatta	tgattgctg
10441	cttttctgct	atatgcatca	tatggagctt	ctaacaggag	tacacgctgg	tactgactta
10501	gaaggtaaat	tctatgggtc	atgtgttgac	agacaaaactg	cacaggctgc	aggtacagac
10561	acaaccataa	cattaaatgt	tttggcatgg	ctgtatgctg	ctgttatcaa	tggtgatagg
10621	tggtttctta	atagattcac	cactactttg	aatgacttta	accttggtgg	aatgaagtac
10681	aactatgaac	ctttgacaca	agatcatggt	gacatattgg	gacctcttcc	tgtcaaaca
10741	ggaaatgccg	tcttagatat	gtgtgctgct	ttgaaagagc	tgctgcagaa	tggtatgaat
10801	ggctgtagta	tccttggtag	cactatttta	gaagatgagt	ttacaccatt	ttaggttgggt
10861	agacaatgct	ctggtgttac	cttccaagggt	aagttcaaga	aaattgttaa	gggcactcat
10921	cattggatgc	ttttaacttt	cttgacatca	ctattgattc	ttgttcaaag	tacacagtgg
10981	tcactgtttt	tctttgttta	cgagaatgct	ttcttgccat	ttactcttgg	tattatggca
11041	attgctgcat	gtgctatgct	gcttggttaag	cataagcacg	cattcttgtg	cttgtttctg

FIGURE 9D

11101	ttaccttctc	ttgcaacagt	tgttactttt	aatatgggtct	acatgcctgc	tagctgggtg
11161	atgcgtatca	tgacatggct	tgaattggct	gacactagct	tgtctgggtta	taggcttaag
11221	gatttgtgta	tgtatgcttc	agcttttagtt	ttgcttattc	tcacgacagc	tgcactggt
11281	tatgatgatg	ctgctagacg	tgtttggaca	ctgatgaatg	tcattacact	tgtttacaaa
11341	gtctactatg	gtaatgcttt	agatcaagct	atttccatgt	gggccttagt	tatttctgta
11401	acctctaact	attctgggtg	cgttacgact	atcatgtttt	tagctagagc	tatagtgttt
11461	gtgtgtgttg	agtattaccc	attgttattt	attactggca	acaccttaca	gtgtatcatg
11521	cttgtttatt	gtttcttagg	ctattgttgc	tgtcgctact	ttggcctttt	ctgtttactc
11581	aaccgttact	tcaggcttac	tcttgggtgt	tatgactact	tggctctctac	acaagaattt
11641	aggtatatga	actcccaggg	gcttttgctt	cctaagagta	gtattgatgc	tttcaagctt
11701	aacattaagt	tgttgggtat	tggaggtaaa	ccatgtatca	aggttgctac	tgtacagtct
11761	aaaatgtctg	acgtaaagtg	cacatctgtg	gtactgctct	cggttcttca	acaacttaga
11821	gtagagtcac	cttctaaatt	gtgggcacaa	tgtgtacaac	tcacacaatga	tattcttctt
11881	gcaaaagaca	caactgaagc	tttcgagaag	atggtttctc	ttttgtctgt	tttgcctatcc
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12001	cttcaggcta	ttgcttcaga	atttagttct	ttaccatcat	atgccgctta	tgccactgcc
12061	caggaggcct	atgagcaggc	tgtagctaat	gggtattctg	aagtcgttct	caaaaagtta
12121	aagaaatctt	tgaatgtggc	taaactctgag	tttgaccgtg	atgctgccat	gcaacgcaag
12181	ttggaaaaga	tggcagatca	ggctatgacc	caaagtaca	aacaggcaag	atctgaggac
12241	aagagggcaa	aagtaactag	tgctatgcaa	acaatgctct	tcactatgct	taggaagctt
12301	gataatgatg	cacttaacaa	cattatcaac	aatgcgcgtg	atggttgtgt	tcactcaac
12361	atcataccat	tgactacagc	agccaaactc	atggttgttg	tccttgatta	tggtaacctac
12421	aagaacactt	gtgatggtaa	cacctttaca	tatgcactctg	cactctggga	aatccagcaa
12481	gttgttgatg	cggatagcaa	gattgttcaa	cttagtgaaa	taacatgga	caattcacca
12541	aatttggctt	ggcctcttat	tgttacagct	ctaagagcca	actcagctgt	taaactacag
12601	aataatgaac	tgagtccagt	agcactacga	cagatgtcct	gtgcggctgg	taccacacaa
12661	acagcttgta	ctgatgacaa	tgcacttgcc	tactataaca	attcgaagg	aggtaggttt
12721	gtgctggcat	tactatcaga	ccaccaagat	ctcaaattggg	ctagattccc	taagattgat
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12841	aaagggccta	aagtgaata	cttgtacttc	atcaaaggct	taaacaacct	aatagagggt
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12961	cctgccaatt	caactgtgct	ttccttctgt	gcttttgcag	tagaccctgc	taaagcatat
13021	aaggattacc	tagcaagtgg	aggacaacca	atcaccact	gtgtgaagat	gttgtgtaca
13081	cacactggta	caggacaggc	aattactgta	acaccagaag	ctaactgga	ccaaggtcc
13141	tttgggtggg	cttcatgttg	tctgtattgt	agatgccaca	ttgaccatcc	aaatcctaaa
13201	ggattctgtg	acttgaaagg	taagtacgtc	caaataccta	ccacttgtgc	taatgacca
13261	gtgggtttta	cacttagaaa	cacagtctgt	accgtctgcg	gaatgtggaa	aggttatggc
13321	tgtagtgtg	accaactccg	cgaacccttg	atgcagtctg	cggatgcac	aacgttttta
13381	aacgggtttg	cgggtgtaagt	gcagcccgct	ttacaccgtg	cggcacaggc	actagtactg
13441	atgtcgtcta	cagggctttt	gatatttaca	acgaaaaagt	tgctgggttt	gcaaagttcc
13501	taaaaaactaa	ttgctgtcgc	ttccaggaga	aggatgagga	aggcaattta	ttagactctt
13561	actttgtagt	taagaggcat	actatgtcta	actaccaaca	tgaagagact	atttataact
13621	tggttaaaga	ttgtccagcg	gttgcgtgcc	atgacttttt	caagtttaga	gtagatgggtg
13681	acatggtacc	acatatatca	cgtcagcgtc	taactaaata	cacaatggct	gatttagtct
13741	atgctctacg	tcattttgat	gagggttaatt	gtgatacatt	aaaagaaata	ctcgtcacat
13801	acaattgctg	tgatgatgat	tatttcaata	agaaggattg	gtatgacttc	gtagagaatc
13861	ctgacatctt	acgcgtatat	gctaacttag	gtgagcgtgt	acgccaatca	ttattaaaga
13921	ctgtacaatt	ctgcgatgct	atgcgtgatg	caggcattgt	aggcgtactg	acattagata
13981	atcaggatct	taatgggaac	tggtagcatt	tccgtgattt	cgtacaagta	gcaccaggct
14041	gcggagttcc	tattgtggat	tcatattact	cattgctgat	gcccattcct	actttgacta
14101	gggcattggc	tgctgagtcc	catatggatg	ctgatctcgc	aaaaccactt	attaagtggg
14161	atttgctgaa	atatgatttt	acggaaagaga	gactttgtct	cttcgaccgt	tattttaaat
14221	attgggacca	gacataccat	cccaattgta	ttactgtttt	ggatgatagg	tgtatccttc
14281	atttgtcaaa	ctttaatgtg	ttattttcta	ctgtgtttcc	acctacaagt	tttggaccac
14341	tagtaagaaa	aatatttgta	gatggtgttc	cttttgttgt	ttcaactgga	taccattttc
14401	gtgagttagg	agtcgtacat	aatcaggatg	taaacttaca	tagctcgcgt	ctcagtttca
14461	aggaactttt	agtgtatgct	gctgatccag	ctatgcacgc	agcttctggc	atatttatgc
14521	tagataaacg	cactacatgc	ttttcagtag	ctgcactaac	aaacaatggt	gcttttcaaa
14581	ctgtcaaacc	cggtaatttt	aataaaagact	tttatgactt	tgctgtgtct	aaaggtttct
14641	ttaaggaagg	aagttctggt	gaactaaaac	acttcttctt	tgctcaggat	ggcaacgctg
14701	ctatcagtga	ttatgactat	tatcggtata	atctgccaac	aatgtgtgat	atcagacaac
14761	tcctattcgt	agttgaagtt	gttgataaat	actttgattg	ttacgatggg	ggctgtatta

FIGURE 9E

14821	atgccaaacca	agtaatcggt	aacaatctgg	ataaatcagc	tgggtttccca	tttaataaat
14881	ggggtaaggc	tagactttat	tatgactcaa	tgagttatga	ggatcaagat	gcacttttcg
14941	cgtataactaa	gcgtaatgtc	atccctacta	taactcaa	gaatcttaag	tatgccatta
15001	gtgcaaagaa	tagagctcgc	accgtagctg	gtgtctctat	ctgtagtact	atgacaaata
15061	gacagtttca	tcagaaatta	ttgaagtcaa	tagccgccac	tagaggagct	actgtggtaa
15121	ttggaacaag	caagttttac	gggtggctggc	ataatatgtt	aaaaactgtt	tacagtgatg
15181	tagaaaactcc	acaccttatg	gggtgggatt	atccaaaatg	tgacagagcc	atgcctaaca
15241	tgcttaggat	aatggcctct	cttgttcttg	ctcgcaaaca	taacacttgc	tgtaaacttat
15301	cacaccgttt	ctacagggtta	gtcaacgagt	gtgcgcaagt	attaagtgag	atggctatgt
15361	gtggcggctc	actatatgtt	aaaccagggtg	gaacatcatc	cgggtgatgt	acaactgctt
15421	atgctaatag	tgtctttaac	atltgtcaag	ctgttacagc	caatgtaaat	gcacttcttt
15481	caactgatgg	taataagata	gctgacaagt	atgtccgcaa	tctacaacac	aggctctatg
15541	agtgtctcta	tagaaatagg	gatgttgatc	atgaattcgt	ggatgagttt	tacgcttacc
15601	tgcgtaaaaca	tttctccatg	atgattcttt	ctgatgatgc	cgttgtgtgc	tataacagta
15661	actatgcggc	tcaaggttta	gtagctagca	ttaaagaactt	taaggcagtt	ctttattatc
15721	aaaataatgt	gttcatgtct	gaggcaaaat	gttggactga	gactgacctt	actaaaggac
15781	ctcacgaatt	ttgctcacag	catacaatgc	tagttaaaca	aggagatgat	tacgtgtacc
15841	tgctttaccc	agatccatca	agaatattag	gctgaggctg	ttttgtcgat	gatattgtca
15901	aaacagatgg	tacacttatg	attgaaagggt	tctgtgctact	ggctattgat	gcttaccac
15961	ttacaaaaca	tcctaatacag	gagtatgctg	atgtctttca	cttgtattta	caatacatta
16021	gaaagttaca	tgatgagctt	actggccaca	gtttggacat	gtattccgta	atgtcaacta
16081	atgataaacac	ctcacgggtac	tgggaacctg	agttttatga	ggctatgtac	acaccacata
16141	cagtcttgca	ggctgttaggt	gcttgtgtat	tgtgcaattc	acagacttca	cttcggttgcg
16201	gtgcctgtat	taggagacca	ttcctatgtt	gcaagtgtg	ctatgaccat	gtcatttcaa
16261	catcacacaa	attagtgttg	tctgttaatc	cctatgtttg	caatgccccca	ggttgtgatg
16321	tcactgatgt	gacacaactg	tatctaggag	gtatgagcta	ttattgcaag	tcacataagc
16381	ctcccattag	ttttccatta	tgtgctaattg	gtcagggtttt	tggttttatac	aaaaacacat
16441	gtgtaggcag	tgacaatgtc	actgacttca	atgcgatagc	aacatgtgat	tggcatatgt
16501	ctggcgatta	catacttgcc	aacacttgta	ctgagagact	caagcttttc	gcagcagaaa
16561	cgctcaaagc	cactgaggaa	acattttaagc	tgtcatatgg	tattgccact	gtacgcgaag
16621	tactctctga	cagagaattg	catctttcat	gggagggttg	aaaacctaga	ccaccattga
16681	acagaaacta	tgtctttact	ggttaccgtg	taactaaaaa	tagtaaaagta	cagattggag
16741	agtacacctt	tgaaaaagggt	gactatgggt	atgctgttgt	gtacagaggt	actacgacat
16801	acaagttgaa	tgttggtgat	tactttgtgt	tgacatctca	cactgtaatg	ctacttagtg
16861	cacctactct	agtgccacaa	gagcactatg	tgagaattac	tggcttgtag	ccaacactca
16921	acatctcaga	tgagttttct	agcaatgttg	caaattatca	aaaggctggc	atgcaaaagt
16981	actctacact	ccaaggacca	cctggtagctg	gtaagagtca	ttttgccatc	ggacttgctc
17041	tctattaccc	atctgctcgc	atagtgtata	cggcatgctc	tcatgcagct	ggtgatgccc
17101	tatgtcaaaa	ggcatttaaaa	tatttgccca	tagataaatg	tagtagaatc	atacctgcgc
17161	gtgcgcgcgt	agagtgtttt	gataaaattca	aagtgaattc	aacactagaa	cagtatgttt
17221	tctgcactgt	aaatgcattg	ccagaaacaa	ctgctgacat	tgtagtcttt	gatgaaatct
17281	ctatggctac	taattatgac	ttgagtgttg	tcaatgctag	acttcgtgca	aaacactacg
17341	tctatattgg	cgatcctgct	caattaccag	ccccccgcac	attgctgact	aaaggcacac
17401	tagaaccaga	atattttta	tcagtgtgca	gacttatgaa	aacaatagggt	ccagacatgt
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17521	atgacaataa	gctaaaagca	cacaaggaga	agtcagctca	atgcttcaaa	atgttctaca
17581	aagggtgttat	tacacatgat	gtttcatctg	caatcaacag	acctcaaata	ggcggtgttaa
17641	gagaattttct	tacacgcaat	cctgcttgga	gaaaagctgt	ttttatctca	ccttataatt
17701	cacagaacgc	tgtagcttca	aaaatcttag	gattgcctac	gcagactgtt	gattcatcac
17761	agggttctga	atatgactat	gtcatattca	cacaaactac	tgaaacagca	cactcttgta
17821	atgtcaaccg	tttcaatgtg	gctatcaca	gggcaaaaat	tggcattttg	tgcataatgt
17881	ctgatagaga	tctttatgac	aaactgcaat	ttacaagtct	agaaataacca	cgtcgcaatg
17941	tggctacatt	acaagcagaa	aatgtaactg	gactttttta	ggactgtagt	aagatcatta
18001	ctgggtcttca	tcctacacag	gcacctacac	acctcagcgt	tgatataaag	ttcaagactg
18061	aaggattatg	tgttgacata	ccaggcatat	caaaggacat	gacctaccgt	agactcatct
18121	ctatgatggg	tttcaaaaatg	aattaccaag	tcaatgggtta	ccctaataatg	tttatcaccc
18181	gcgaagaagc	tattcgtcac	gttcgtgcgt	ggattggctt	tgatgtagag	ggctgtcatg
18241	caactagaga	tgctgtgggt	actaacctac	ctctccagct	aggattttct	acagggtgta
18301	acttagtagc	tgtaccgact	ggttatgttg	acactgaaaa	taacacagaa	ttcaccagag
18361	ttaatgcaaa	acctccacca	ggtgaccagt	ttaaacatct	tataccactc	atgtataaag
18421	gcttgccctg	gaatgtagtg	cgtattaaga	tagtacaat	gctcagtgat	acactgaaag
18481	gattgtcaga	cagagtcgtg	ttcgtccttt	gggcgcagtg	ctttgagctt	acatcaatga

FIGURE 9F

18541	agtactttgt	caagattgga	cctgaaagaa	cgtgttgtct	gtgtgacaaa	cgtgcaactt
18601	gcttttctac	ttcatcagat	acttatgcct	gctggaatca	ttctgtgggt	tttgactatg
18661	tctataaccc	atztatgatt	gatgttcagc	agtggggctt	tacgggtaac	cttcagagta
18721	accatgacca	acattgccag	gtacatggaa	atgcacatgt	ggctagtgtg	gatgctatca
18781	tgactagatg	tttagcagtc	catgagtgtc	ttgttaagcg	cgttgattgg	tctgttgaat
18841	accctattat	aggagatgaa	ctgaggggta	attctgcttg	cagaaaagta	caacacatgg
18901	ttgtgaagtc	tgcattgctt	gctgataagt	ttccagttct	tcatgacatt	ggaaatccaa
18961	aggctatcaa	gtgtgtgcct	caggctgaag	tagaatggaa	gttctacgat	gctcagccat
19021	gtagtacaaa	agcttacaaa	atagaggagc	tcttctatct	ttatgctaca	catcacgata
19081	aattcactga	tgggtgttgt	ttgttttggg	attgtaacgt	tgatcggtac	ccagccaatg
19141	caattgtgtg	taggtttgac	acaagagtct	tgtcaaactt	gaacttacca	ggctgtgatg
19201	gtggtagttt	gtatgtgaat	aagcatgcat	tccacactcc	agctttcgat	aaaagtgcac
19261	ttactaattt	aaagcaattg	cctttctttt	actattctga	tagtccttgt	gagtcctcatg
19321	gcaaacaagt	agtgtcggat	attgattatg	ttccactcaa	atctgctacg	tgtattacac
19381	gatgcaattt	agggtgtgct	gtttgcagac	accatgcaaa	tgagtaccga	cagtacttgg
19441	atgcatataa	tatgatgatt	tctgtcggat	ttagcctatg	gatttacaaa	caatttgata
19501	cttataacct	gtggaataca	tttaccagggt	tacagagttt	agaaaatgtg	gcttataatg
19561	ttgttaataa	aggacacttt	gatggacacg	ccggcgaagc	acctgtttcc	atcattaata
19621	atgctgttta	cacaaaggta	gatggatttg	atgtggagat	ctttgaaaat	aagacaacac
19681	ttcctgttaa	tgttgcattt	gagccttggg	ctaagcgtaa	cattaaacca	gtgccagaga
19741	ttaagatact	caataatttg	gggtgtgata	tcgctgctaa	tactgtaatc	tgggactaca
19801	aaagagaagc	cccagcacat	gtatctacaa	taggtgtctg	cacaatgact	gacattgcca
19861	agaaacctac	tgagagtgtc	tgttcttcac	ttactgtctt	gtttgatggg	agagtgggaag
19921	gacaggtaga	ccttttttaga	aacgcccgtg	atgggtgttt	aataacagaa	gggttcagtca
19981	aaggctctaac	accttcaaag	ggaccagcac	aagctagcgt	caatggagtc	acattaattg
20041	gagaatcagt	aaaaacacag	tttaactact	ttaagaaagt	agacggcatt	attcaacagt
20101	tgcttgaac	ctactttact	cgagcagag	acttagagga	ttttaagccc	agatcacaaa
20161	tggaaactga	ctttctcgag	ctcgctatgg	atgaattcat	acagcgatat	acgtcgagg
20221	gctatgcctt	cgaacacatc	gtttatggag	atttcagtca	tggacaactt	ggcgggtcttc
20281	atttaatgat	aggcttagcc	aagcgctcac	aagattcacc	acttaaatca	gaggatttta
20341	tccctatgga	cagcacagtg	aaaaattact	tcataacaga	tgcgcaaaca	gggttcacaa
20401	aatgtgtgtg	ttctgtgatt	gatcctttac	ttgatgactt	tgtcgagata	ataaagtcac
20461	aagatttgtc	agtgatttca	aaagtgggtc	aggttacaat	tgactatgct	gaaatttcat
20521	tcattgctttg	gtgtaaggat	ggacatgttg	aaaccttcta	cccaaaacta	caagcaagtc
20581	aagcgtggca	accagggtgtt	gcgatgccta	acttgtacaa	gatgcaaaga	atgcttcttg
20641	aaaagtgtga	ccttcagaat	tatgggtgaa	atgctgttat	accaaaagga	ataatgatga
20701	atgtcgcaaa	gtataactca	ctgtgtcaat	acttaaatac	acttacttta	gctgtaccct
20761	acaacatgag	agttattcac	tttgggtgctg	gctctgataa	aggagttagca	ccaggtagacg
20821	ctgtgctcag	acaatgggtg	ccaactggga	cactacttgt	cgattcagat	cttaatgact
20881	tcgtctccga	cgcagattct	actttaattg	gagactgtgc	aacagtacat	acggctagata
20941	aatgggacct	tattattagc	gatatgtatg	accctaggac	caaacatgtg	acaaaagaga
21001	atgactctaa	agaagggttt	ttcacttatc	tgtgtggatt	tataaagcaa	aaactagccc
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21121	ttatgggcca	tttctcatgg	tggacagctt	ttgttacaaa	tgtaaatgca	tcacatcggg
21181	aagcattttt	aattggggct	aactatcttg	gcaagccgaa	ggaacaaatt	gatggctata
21241	ccatgcatgc	taactacatt	ttctggagga	acacaaatcc	tatccagttg	tcttcttatt
21301	cactctttga	catgagcaaa	tttctcttta	aattaagagg	aactgctgta	atgtctctta
21361	aggagaatca	aatcaatgat	atgatttatt	ctcttctgga	aaaaggtagg	cttatcatta
21421	gagaaaacaa	cagagttgtg	gtttcaagtg	atattcttgt	taacaactaa	acgaacatgt
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21541	ttgatgatgt	tcaagctcct	aattacactc	aacataactc	atctatgagg	ggggtttact
21601	atcctgatga	aatttttaga	tcagacactc	tttatttaac	tcaggattta	tcttctccat
21661	tttattctaa	tgttacaggg	tttcatacta	ttaatcatac	gtttgacaac	ctctgcatac
21721	cttttaagga	tggattttat	tttgcgtgcca	cagagaaatc	aaatgttgct	cgtgggtggg
21781	tttttggttc	taccatgaac	aacaagtcac	agtcggtgat	tattattaac	aattctacta
21841	atgttgttat	acgagcatgt	aactttgaat	tgtgtgacaa	ccctttcttt	gctgtttcta
21901	aacccatggg	tacacagaca	catactatga	tattcgataa	tgcatttaat	tgcactttcg
21961	agtacatata	tgatgccttt	tcgcttgatg	tttcagaaaa	gtcaggtaat	tttaaacact
22021	tacgagagtt	tgtgtttaaa	aataaagatg	ggtttctcta	tgttttataag	ggctatcaac
22081	ctatagatgt	agttcgtgat	ctaccttctg	gttttaacac	tttgaaacct	atttttaagt
22141	tgctctcttg	tattaacatt	acaaatttta	gagccattct	tacagccttt	tcacctgctc
22201	aagacacttg	gggcacgtca	gctgcagcct	attttgttgg	ctattttaag	ccaactacat

FIGURE 9G

22261	ttatgctcaa	gtatgatgaa	aatggtacaa	tcacagatgc	tgttgattgt	tctcaaaatc
22321	cacttgctga	actcaaatgc	tctggttaaga	gctttgagat	tgacaaagga	atttaccaga
22381	cctctaattt	caggggtggt	ccctcaggag	atggtgtgag	attccctaata	attacaaact
22441	tgtgtccttt	tggagaggtt	tttaatgcta	ctaaattccc	ttctgtctat	gcatgggaga
22501	gaaaaaaaaat	ttctaattgt	gttgctgatt	actctgtgct	ctacaactca	acattttttt
22561	caaccttttaa	gtgctatggc	gtttctgcca	ctaagttgaa	tgatctttgc	ttctccaatg
22621	tctatgcaga	ttcttttgta	gtcaagggag	atgatgtaag	acaaatagcg	ccaggacaaa
22681	ctgggtggtt	tgctgattat	aattataaat	tgccagatga	tttcatgggt	tgtgtccttg
22741	cttggaatac	taggaacatt	gatgctactt	caactggtaa	ttataattat	aaatataggt
22801	atcttagaca	tggcaagctt	aggccctttg	agagagacat	atctaattgtg	cctttctccc
22861	ctgatggcaa	accttgcacc	ccacctgctc	ttaattgtta	ttggccatta	aatgattatg
22921	gttttttacac	cactactggc	attggctacc	aaccttacag	agttgtagta	ctttcttttg
22981	aactttttaa	tgcaccggcc	acggtttgtg	gacccaaatt	atccactgac	cttattaaga
23041	accagtgtgt	caattttaat	tttaatggac	tcactggtac	tggtgtgtta	actccttctt
23101	caaagagatt	tcaaccattt	caacaatttg	gccgtgatgt	ttctgatttc	actcattccg
23161	ttcgagatcc	taaaacatct	gaaatattag	acatttcacc	ttgctctttt	gggggtgtaa
23221	gtgtaattac	acctggaaca	aatgcttcat	ctgaagttgc	tgttctatat	caagatgtta
23281	actgcactga	tgtttctaca	gcaattcatg	cagatcaact	cacaccagct	tggcgcatat
23341	attctactgg	aaacaatgta	ttccagactc	aagcaggctg	tcttatagga	gctgagcatg
23401	tcgacacttc	ttatgagtgc	gacattccta	ttggagctgg	catttgtgct	agttaccata
23461	cagtttcttt	attacgtagt	actagccaaa	aatctattgt	ggcttatact	atgtctttag
23521	gtgctgatag	ttcaattgct	tactctaata	acaccattgc	tatactact	aacttttcaa
23581	ttagcattac	tacagaagta	atgcctgttt	ctatggctaa	aacctccgta	gattgtaata
23641	tgtacatctg	cggagattct	actgaatgtg	ctaatttgct	tctccaatat	ggtagctttt
23701	gcacacaact	aaatcgtgca	ctctcaggta	ttgctgctga	acaggatcgc	aacacacgtg
23761	aagtgttcgc	tcaagtcaaa	caaatgtaca	aaaccccaac	tttgaaatat	tttgggtggt
23821	ttaattttct	acaaatatta	cctgacctc	taagccaac	taagaggtct	tttattgagg
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23941	gcctaggtga	tattaatgct	agagatctca	tttgtgcgca	gaagttcaat	ggacttacag
24001	tgttgccacc	tctgctcact	gatgatatga	ttgctgccta	cactgctgct	ctagttagtg
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24181	aaaaaacaat	cgccaaccaa	tttaacaagg	cgattagtca	aattcaagaa	tcacttacaa
24241	caacatcaac	tgcattgggc	aagctgcaag	acgttggtta	ccagaatgct	caagcattaa
24301	acacacttgt	taaacaactt	agctctaatt	ttggtgcaat	ttcaagtgtg	ctaaatgata
24361	tcctttcgcg	acttgataaa	gtcgaggcgg	aggtacaaat	tgacagggtta	attacaggca
24421	gacttcaaag	ccttcaaacc	tatgtaacac	aacaactaat	cagggctgct	gaaatcaggg
24481	cttctgctaa	tcttgctgct	actaaaatgt	ctgagtgtgt	tcttgacaa	tcaaaaagag
24541	ttgacttttg	tggaaagggc	taccacctta	tgtccttccc	acaagcagcc	ccgcattggtg
24601	ttgtcttctt	acatgtcacg	tatgtgccat	cccaggagag	gaacttcacc	acagcgccag
24661	caatttgtca	tgaaggcaaa	gcatacttcc	ctcgtgaagg	tgtttttgtg	tttaattggca
24721	cttcttggtt	tattacacag	aggaaacttct	tttctccaca	aataattact	acagacaata
24781	catttgtctc	aggaaattgt	gatgtcgtta	ttggcatcat	taacaacaca	gtttatgatc
24841	ctctgcaacc	tgagcttgac	tcattcaaag	aagagctgga	caagtacttc	aaaaatcata
24901	catcaccaga	tgttgatctt	ggcgacattt	caggcattaa	cgcttctgtc	gtcaacattc
24961	aaaaagaaat	tgaccgcctc	aatgaggtcg	ctaaaaattt	aaatgaatca	ctcattgacc
25021	ttcaagaatt	gggaaaaatat	gagcaatata	ttaaatggcc	ttggtatgtt	tggctcggtt
25081	tcattgctgg	actaattgcc	atcgctcatgg	ttacaatctt	gctttgttgc	atgactagtt
25141	gttgacgttg	cctcaagggt	gcatgctctt	gtggttcttg	ctgcaagttt	gatgaggatg
25201	actctgagcc	agttctcaag	ggtgtcaaat	tacattacac	ataaacgaac	ttatggattt
25261	gttttatgaga	ttttttactc	ttggatcaat	tactgcacag	ccagtaaaaa	ttgacaatgc
25321	ttctcctgca	agtactgttc	atgctacagc	aacgataccg	ctacaagcct	ctaccctttt
25381	cggatggcct	gttattggcg	ttgcatttct	tgctgttttt	cagagcgcta	ccaaaataat
25441	tgcgctcaat	aaaagatggc	agctagccct	ttataagggc	ttccagttca	tttgcaattt
25501	actgctgcta	tttgttacca	tctattcaca	tcttttgctt	gtcgctgcag	gtatggaggc
25561	gcaatttttg	tacctctatg	ccttgatata	ttttctacaa	tgcatcaacg	catgtagaat
25621	tattatgaga	tgttggcttt	gttgggaagt	caaatccaag	aaccatttac	tttatgatgc
25681	caactacttt	gtttgctggc	acacacataa	ctatgactac	tgtataccat	ataacagtgt
25741	cacagataca	attgtcggtta	ctgaagggtga	cggcatttca	acacaaaaac	tcaagaaga
25801	ctaccaaat	ggtgggttatt	ctgaggatag	gcactcaggt	gttaaagact	atgtcgttgt
25861	acatggctat	ttcaccgaag	tttactacca	gcttgagtct	acacaaatta	ctacagacac
25921	tggtattgaa	aatgctacat	tcttcatctt	taacaagctt	gttaaagacc	caccgaatgt

FIGURE 9H

25981	gcaaatcacac	acaatcgacg	gctcttcagg	agttgcta	ccagcaatgg	atccaattta
26041	tgatgagccg	acgacgacta	ctagcgtgcc	tttgaagca	caagaaagt	agtacgaact
26101	tatgtactca	ttcgttttcg	aagaaacagg	tacgttaata	gttaatagcg	tacttctttt
26161	tcttgctttc	gtggtattct	tgctagtcac	actagccatc	cttactgcgc	ttcgattgtg
26221	tgcgtagctg	tgcaatattg	ttaacgtgag	tttagtaaaa	ccaacgggtt	acgtctactc
26281	gcgtgttaaa	aatctgaact	cttctgaagg	agttcctgat	cttctgggtc	aaacgaacta
26341	actattatta	ttattctggt	tggaacttta	acattgctta	tcatggcaga	caacgggtact
26401	attaccgttg	aggagcttaa	acaactcctg	gaacaatgga	acctagta	agggttctta
26461	ttcctagcct	ggattatggt	actacaattt	gcctattcta	atcggaacag	gtttttgtac
26521	ataataaagc	ttgttttctt	ctggctcttg	tggccagtaa	cacttgcttg	ttttgtgctt
26581	gctgctgtct	acagaattaa	ttgggtgact	ggcgggattg	cgattgcaat	ggcttgtatt
26641	gtaggcttga	tgtggcttag	ctacttcggt	gcttccttca	ggctgtttgc	tcgtagccgc
26701	tcaatgtggt	cattcaaccc	agaaacaaac	attcttctca	atgtgcctct	ccgggggaca
26761	attgtgacca	gaccgctcat	ggaaagtga	cttgtcattg	gtgctgtgat	cattcgtggt
26821	cacttgcgaa	tggccggaca	ctccctaggg	gcctgtgaca	ttaaggacct	gccaaaagag
26881	atcactgtgg	ctacatcacg	aacgctttct	tattacaaat	taggagcgct	gcagcgtgta
26941	ggcactgatt	cagggttttg	tgcatataac	cgctaccgta	ttggaaacta	taaattaaat
27001	acagaccacg	ccggtagcaa	cgacaatatt	gctttgctag	tacagtaagt	gacaacagat
27061	gtttcatctt	gttgacttcc	agggtacaat	agcagagata	ttgattatca	ttatgaggac
27121	tttcaggatt	gctatttgga	atcttgacgt	tataataagt	tcaatagtga	gacaattatt
27181	taagcctcta	actaagaaga	attattcgga	gttagatgat	gaagaacctt	tggagttaga
27241	ttatccataa	aacgaacatg	aaaattattc	tcttcctgac	attgattgta	tttcatcttt
27301	gcgagctata	tactatcag	gagtgtgtta	gaggtacgac	tgtactacta	aaagaacctt
27361	gcccatacag	aacatacag	ggcaattcac	catttcaccc	tcttgctgac	aataaatttg
27421	cactaacttg	cactagcaca	cactttgctt	ttgcttgtgc	tgacgggtact	cgacatacct
27481	atcagctgcg	tgcaagatca	gtttcaccaa	aacttttcat	cagacaagag	gaggttcaac
27541	aagagctcta	ctcgccactt	tttctcattg	tgtctgctct	agtattttta	atactttgct
27601	tcaccattaa	gagaaagaca	gaatgaatga	gtcactttta	attgacttct	atttgtgctt
27661	tttagccttt	ctgctattcc	ttgtttta	aatgcttatt	atattttggt	tttactcga
27721	aatccaggat	ctagaagaac	cttgtacca	agtctaaacg	aacatgaaac	ttctcattgt
27781	tttgacttgt	atttctctat	gcagttgcat	acgcactgta	gtacagcgct	gtgcatctaa
27841	taaacctcat	gtgcttgaag	atccttgtaa	ggtacaacac	taggggta	acttatagca
27901	ctgcttggtc	ttgtgctcta	ggaaaggttt	taccttttca	tagatggcac	actatgggtc
27961	aaacatgcac	acctaatggt	actatcaact	gtcaagatcc	agctgggtgg	gcgcttatag
28021	ctaggtgttg	gtaccttcat	gaaggtcacc	aaactgctgc	atttagagac	gtacttgttg
28081	ttttaataaa	acgaacaaat	taaaatgtct	gataatggac	cccaatcaaa	ccaacgtagt
28141	gccccccgca	ttacatttgg	tggacccaca	gattcaactg	acaataacca	gaatggagga
28201	cgcaatgggg	caaggccaaa	acagcgccga	ccccaaaggt	tacccaataa	tactgcgtct
28261	tggttcacag	ctctcactca	gcattggcaag	gaggaactta	gattccctcg	aggccagggc
28321	gttccaatca	acaccaatag	tggctccagat	gaccaaattg	gctactaccg	aagagctacc
28381	cgacgagttc	gtggtggtga	cggcaaaatg	aaagagctca	gccccagatg	gtacttctat
28441	tacctaggaa	ctggcccaga	agcttcactt	ccctacggcg	ctaacaaaga	aggcatcgta
28501	tgggttgcaa	ctgagggagc	cttgaataca	cccaaagacc	acattggcac	ccgcaatcct
28561	aataacaatg	ctgccaccgt	gctacaactt	cctcaaggaa	caacattgcc	aaaaggcttc
28621	tacgcagagg	gaagcagagg	cggcagtc	gcctcttctc	gctcctcatc	acgtagtgcg
28681	ggtaattcaa	gaaattcaac	tcttggcagc	agtaggggaa	attctcctgc	tcgaatggct
28741	agcggaggtg	gtgaaactgc	cctcgcgcta	ttgtgctag	acagattgaa	ccagcttgag
28801	agcaaagt	ctggtaaagg	ccaacaacaa	caaggccaaa	ctgtcactaa	gaaatctgct
28861	gctgaggcat	ctaaaaagcc	tgcgcaaaaa	cgtactgcca	caaaacagta	caacgtcact
28921	caagcatttg	ggagacgtgg	tccagaacaa	acccaaggaa	atttcgggga	ccaagacctt
28981	atcagacaag	gaactgatta	caaactttgg	ccgcaaat	cacaatttgc	tccaagtgc
29041	tctgtattct	ttggaatgtc	acgcattggc	attggaagtca	caccttcggg	aacattggctg
29101	acttatcatg	gagccattaa	attggatgac	aaagatccac	aattcaaaga	caacgtcata
29161	ctgctgaaca	agcacattga	cgcatacaaa	acattcccac	caacagagcc	taaaaaggac
29221	aaaaagaaaa	agactgatga	agctcagcct	ttgccgcaga	gacaaaagaa	gcagccact
29281	gtgactcttc	ttcctgcggc	tgacatggat	gatttctcca	gacaacttca	aaattccatg
29341	agtggagctt	ctgctgattc	aactcaggca	taaactactca	tgatgaccac	acaaggcaga
29401	tgggttatgt	aaacgttttc	gcaattccgt	ttacgatata	tagtctactc	ttgtgcagaa
29461	tgaattctcg	taactaaaca	gcacaagt	gtttagttaa	ctttaatctc	acatagcaat
29521	ctttaatcaa	tgtgtaacat	tagggaggac	ttgaaagagc	caccacattt	tcatcgaggc
29581	cacgcggagt	acgatcgagg	gtacagtga	taatgctagg	gagagctgcc	tatatggaag

FIGURE 9I

29641 agccctaag tgtaaaatta attttagtag tgctatcccc atgtgatttt aatagcttct
29701 taggagaatg aaaaaaaaaa aaaaaaaaaa aaaaaa

FIGURE 10

1	tctgtgtagc	tgtcgctcgg	ctgcatgcct	agtgcaccta	cgcagtataa	acaataataa
61	atthttactgt	cgttgacaag	aaacgagtaa	ctcgtccctc	ttctgcagac	tgcttacggg
121	ttcgtccgtg	ttgcagtcga	tcatcagcat	acc taggttt	cgtccgggtg	tgaccgaaag
181	gtaagatgga	gagccttggt	cttggtgtca	acgagaaaaac	acacgtccaa	ctcagtttgc
241	ctgtccttca	ggtagagac	gtgctagtgc	gtggcttcgg	ggactctgtg	gaagaggccc
301	tatcggaggc	acgtgaacac	ctcaaaaatg	gcacttgtgg	tctagtagag	ctggaaaaag
361	gcgtactgcc	ccagcttgaa	cagccctatg	tgttcattaa	acgttctgat	gccttaagca
421	ccaatcacgg	ccacaaggct	gttgagctgg	ttgcagaaat	ggacggcatt	cagtacgggc
481	gtagcgggtat	aacactggga	gtactcgtgc	cacatgtggg	cgaaacccca	attgcatacc
541	gcaatgttct	tcttcgtaag	aacggtaata	agggagccgg	tggtcatagc	tatggcatcg
601	atctaaagtc	ttatgactta	ggtgacgagc	ttggcactga	tcccattgaa	gattatgaac
661	aaaactggaa	cactaagcat	ggcagtggtg	cactccgtga	actcactcgt	gagctcaatg
721	gaggtgtagt	cactcgctat	gtcgacaaca	atttctgtgg	cccagatggg	taccctcttg
781	attgcatcaa	agatthttcta	gcacgcgcgg	gcaagtcaat	gtgcactctt	tccgaacaac
841	ttgattacat	cgagtcgaag	agaggtgtct	actgctgccg	tgaccatgag	catgaaattg
901	cctggttcac	tgagcgctct	gataagagct	gcgagcacca	gacacccttc	gaaattaaga
961	gtgccaagaa	atthgacact	ttcaaagggg	aatgcccaaa	gtthgtgttt	cctcttaact
1021	caaaagtc aa	agtcattcaa	ccacgtgttg	aaaagaaaaa	gactgagggg	ttcatggggc
1081	gtatacgctc	tgtgtaccct	gthgcatctc	cacaggagtg	taacaatatg	cacttgtcta
1141	ccttgatgaa	atgtaatcat	tgcatgaag	thtcatggca	gacgtgagac	thtctgaaag
1201	ccacttgtga	acattgtggc	actgaaaatt	tagttattga	aggacctact	acatgtgggt
1261	acctacctac	taatgctgta	gtgaaaatgc	catgtcctgc	ctgtcaagac	ccagagattg
1321	gacctgagca	tagtgthgca	gattatcaca	accactcaaa	cattgaaact	cgactccgca
1381	agggaggtag	gactagatgt	thtggaggct	gtgtgtthtg	ctatgtthggc	tgctataata
1441	agcgtgccta	ctgggttcct	cgtgctagtg	ctgatattgg	ctcaggccat	actggcatta
1501	ctggtgacaa	tgtggagacc	thgaaatgagg	atctcctthga	gatactgagt	cgtgaacgtg
1561	thaaacattaa	cattgtthggc	gaththtcatt	tgaatgaaga	ggttgccatc	aththggcat
1621	ctthtctctgc	thtctacaagt	gcctthtattg	acactataaa	gagthcttgat	tacaagtctt
1681	tcaaaaccat	tgthgagthcc	thgcggt			

FIGURE 11A

1	agtgttttat	tagcacttca	acagcttgaa	gtcaaattca	atgcaccagc	acttcaagag
61	gcttattata	gagcccgtgc	tggatgatgct	gctaactttt	gtgcactcat	actcgcttac
121	agtaataaaa	ctgttggcga	gcttgggtgat	gtcagagaaa	ctatgaccca	tcttctacag
181	catgctaatt	tggaatctgc	aaagcgagtt	cttaaatgtgg	tgtgtaaaca	ttgtggtcag
241	aaaactacta	ccttaacggg	tgtagaagct	gtgatgtata	tgggtactct	atcttatgat
301	aatcttaaga	caggtgtttc	cattccatgt	gtgtgtggtc	gtgatgtctac	acaatatcta
361	gtacaacaag	agtcttcttt	tgttatgatg	tctgcaccac	ctgctgagta	taaattacag
421	caaggtagat	tcttatgtgc	gaatgagtac	actggtaact	atcagtgtgg	tcattacact
481	catataactg	ctaaggagac	cctctatcgt	attgacggag	ctcaccttac	aaagatgtca
541	gagtacaaag	gaccagtgc	tgatgttttc	tacaaggaaa	catcttacac	tacaaccatc
601	aagcctgtgt	cgtataaaact	cgatggagtt	acttacacag	agattgaacc	aaaattggat
661	gggtattata	aaaaggataa	tgcttactat	acagagcagc	ctatagacct	tgtaccaact
721	caaccattac	caaatgcgag	ttttgataat	ttcaaactca	catgttctaa	cacaaaattt
781	gctgatgatt	taaatcaaat	gacagccttc	acaaagccag	cttcacgaga	gctatctgtc
841	acattcttcc	cagacttgaa	tggcgtatgta	gtggctattg	actatagaca	ctattcagcg
901	agtttcaaga	aaggtgctaa	attactgcat	aagccaattg	tttggcacat	taaccaggct
961	acaaccaaga	caacgttcaa	accaaact	tgggtgtttac	gttgtctttg	gagtacaaag
1021	ccagtagata	cttcaaattc	atttgaagt	ctggcagtag	aagacacaca	aggaatggac
1081	aatcttgctt	gtgaaagtca	acaaccacc	tctgaagaag	tagtggaaaa	tcctaccata
1141	cagaagggaag	tcatagagt	tgacgtgaaa	actaccgaag	ttgtaggcaa	tgtcatactt
1201	aaaccatcag	atgaagggtg	taaagttaaca	caagagttag	gtcatggagg	tcttatggct
1261	gcttatgtgg	aaaacacaag	cattaccatt	aagaaaccta	atgagctttc	actagcctta
1321	ggtttaaaaa	caattgccac	tcatgggtatt	gctgcaatta	atagtgttcc	ttggagtaaa
1381	attttggctt	atgtcaaacc	attcttagga	caagcagcaa	ttacaacatc	aaattgcgct
1441	aagagattag	cacaacgtgt	gtttaacaat	tatatgcctt	atgtgtttac	attattgttc
1501	caattgtgta	cttttactaa	aagtaccaat	ctagaatta	gagcttcact	acctacaact
1561	attgctaaaa	atagtgttaa	gagtggtgct	aaattatggt	tggatgccgg	cttaatttat
1621	gtgaagtcac	ccaaattttc	taaattgttc	acaatcgcta	tgtggctatt	gttgtaagt
1681	atttgcttag	gttctcta	ctgtgtaact	gctgcttttg	gtgtactctt	atctaatttt
1741	ggtgtcctt	cttattgtaa	tggcggttaga	gaattgtatc	ttaattcgtc	taacgttact
1801	actatggatt	tctgtgaagg	ttcttttctt	tgcagcattt	gtttaagtgg	attagactcc
1861	cttgattctt	atccagctct	tgaaccatt	caggtgacga	tttcatcgta	caagctagac
1921	ttgacaattt	taggtctggc	cgctgagttg	gttttggcat	atatgttggt	cacaaaattc
1981	ttttattttat	taggtctttc	agctataatg	caggtgttct	ttggctattt	tgctagtcac
2041	ttcatcagca	attcttggct	catgtgggtt	atcattagta	ttgtacaaat	ggcaccgctt
2101	tctgcaatgg	ttaggatgta	catcttcttt	gcttctttct	actacatatg	gaagagctat
2161	gttcatatca	tggatgggtg	cacctcttcg	acttgcacga	tgtgctataa	gcgcaatcgt
2221	gccacacgcg	ttgagtgtac	aactattggt	aatggcatga	agagatcttt	ctatgtctat
2281	gcaaatggag	gccgtggctt	ctgcaagact	cacaattgga	attgtctcaa	ttgtgacaca
2341	ttttgactg	gtagtacatt	cattagtgtg	gaagttgttc	gtgatttgtc	actccagttt
2401	aaaagaccaa	tcaaccctac	tgaccagtca	tcgtatattg	ttgatagtgt	tgctgtgaaa
2461	aatggcgcg	ttcacctcta	ctttgacaag	gctgggtcaa	agacctatga	gagacatccg
2521	ctctcccatt	ttgtcaattt	agacaatttg	agagctaaca	acactaaagg	ttactgcct
2581	attaatgtca	tagtttttga	tggcaagtcc	aaatgcgacg	agtctgcttc	taagtctgct
2641	tctgtgtact	acagtacgct	gatgtgccaa	cctattctgt	tgcttgacca	agctcttgta
2701	tcagacgttg	gagatagtac	tgaagtttcc	gttaagatgt	ttgatgctta	tgtcgacacc
2761	ttttcagcaa	cttttagtgt	tcctatggaa	aaacttaagg	cacttggtgc	tacagctcac
2821	agcgagttag	caaagggtgt	agcttttagat	ggtgtccttt	ctacattcgt	gtcagctgcc
2881	cgacaagggt	ttgttgatac	cgatgttgac	acaaaggatg	ttattgaatg	tctcaaactt
2941	tcacatcact	ctgacttaga	agtgcacagt	gacagtgtga	acaatttcat	gctcacctat
3001	aaataagggt	aaaacatgac	gccagagat	cttggcgcat	gtattgactg	taatgcaagg
3061	catatcaatg	cccaagtagc	aaaaagtcac	aatgtttcac	tcattctggaa	tgtaaaagac
3121	tacatgtctt	tatctgaaca	gctgcgtaaa	caaattcgta	gtgctgccaa	gaagaacaac
3181	atacctttta	gactaacttg	tgctacaact	agacaggttg	tcaatgtcat	aactactaaa
3241	atctcactca	aggggtgtaa	gattgttagt	acttgtttta	aacttatgct	taaggccaca
3301	ttattgtgcg	ttcttgctgc	attggtttgt	tatatcgtaa	tgccagtaca	tacattgtca
3361	ttcatgtatg	gttacacaaa	tgaaatcatt	ggttacaaaag	ccattcagga	tggtgtcact
3421	cgtgacatca	tttctactga	tgattgtttt	gcaaataaac	atgctgggtt	tgacgcatgg
3481	tttagccagc	gtgggtggtc	atacaaaaat	gacaaaagct	gccctgtagt	agctgctatc
3541	attacaagag	agattgggtt	catagtgcct	ggcttaccgg	gtactgtgct	gagagcaatc
3601	aatggtgact	tcttgcat	tctacctcgt	gttttttagtg	ctgttggtgaa	catttgctac

FIGURE 11B

3661	acaccttcca	aactcattga	gtatagtgat	tttgctacct	ctgcttgctg	tcttgctgct
3721	gagtgtacaa	tttttaagga	tgctatgggc	aaacctgtgc	catattgtta	tgacactaat
3781	ttgctagagg	gttctatttc	ttatagtga	cttcgtccag	acactcgtta	tgtgcttatg
3841	gatggttcca	tcatacagtt	tcctaact	tacctggagg	gttctgttag	agtagtaaca
3901	acttttgatg	ctgagtactg	tagacatgg	acatgcgaaa	ggtcagaagt	aggtatttgc
3961	ctatctacca	gtggtagatg	ggttcttaat	aatgagcatt	acagagctct	atcaggagtt
4021	ttctgtgggtg	ttgatgcgat	gaatctcata	gctaacatct	ttactcctct	tgtgcaacct
4081	gtgggtgctt	tagatgtgtc	tgcttcagta	gtggctgggtg	gtattattgc	catattgggtg
4141	acttggtgctg	cctactactt	tatgaaattc	agacgtgttt	ttggtgagta	caaccatggt
4201	gttgctgcta	atgcactttt	gtttttgatg	tctttcacta	tactctgtct	ggtaccagct
4261	tacagctttc	tgccgggagt	ctactcagtc	ttttacttgt	acttgacatt	ctatttcacc
4321	aatgatgttt	cattcttggc	tcaccttcaa	tggtttgcca	tgttttctcc	tattgtgcct
4381	ttttggataa	cagcaatcta	tgtattctgt	atttctctga	agcactgcca	ttggttcttt
4441	aacaactatc	ttaggaaaag	agtcattgtt	aatggagtta	catttagtac	cttcgaggag
4501	gctgctttgt	gtacctttt	gctcaacaag	gaaatgtacc	taaaattgcg	tagcgagaca
4561	ctggtgccac	ttacacagta	taacagggtat	cttgctctat	ataacaagta	caagtatttc
4621	agtggagcct	tagatactac	cagctatcgt	gaagcagctt	gctgccactt	agcaaaggct
4681	ctaaatgact	ttagcaactc	agggtcgtgat	gttctctacc	aaccaccaca	gacatcaatc
4741	acttctgctg	ttctgcagag	tggttttagg	aaaatggcat	tcccgtcagg	caaagtggaa
4801	gggtgcatgg	tacaagtaac	ctgtggaact	acaactctta	atggattgtg	gttggatgac
4861	acagtatact	gtccaagaca	tgtcatttgc	acagcagaag	acatgcttaa	tcctaactat
4921	gaagatctgc	tcattcgcaa	atccaacctat	agctttcttg	ttcaggctgg	ccatgttcaa
4981	cttcgtgtta	ttggccattc	tatgcaaaat	tgtctgctta	ggcttaaagt	tgatacttct
5041	aaccctaaga	caccaagta	taaatttgtc	cgtatccaac	ctggtcaaac	attttcagtt
5101	ctagcatgct	acaatgggtc	accatctggt	gtttatcagt	gtgccatgag	acctaatacat
5161	accattaaag	gttctttcct	taatggatca	tgtggtagtg	ttggttttaa	cattgattat
5221	gattgcgtgt	ctttctgcta	tatgcatcat	atggagcttc	caacaggagt	acacgctggt
5281	accgacttag	aaggtaaaat	ctatggtcca	ttggttgaca	gacaaaactgc	acaggctgca
5341	ggtacagaca	caaccataac	attaaatggt	ttggcatggc	tgtatgctgc	tgttatcaat
5401	ggtgatagg	ggtttcttaa	tagattcacc	actactttga	atgactttaa	ccttggtggca
5461	atgaagtaca	actatgaacc	tttgacacaa	gatcatgttg	acatattggg	acctctttct
5521	gctcaaacag	gaattgccgt	cttagatatg	tgtgctgctt	tgaaaagagct	gctgcagaat
5581	ggtatgaatg	gtcgtactat	ccttggtagc	actattttag	aagatgagtt	tacaccattt
5641	gatgttggtta	gacaatgctc	tggtgtttacc	ttccaaggta	agttcaagaa	aattgttaag
5701	ggcactcatc	attggatgct	tttaactttc	ttgacatcac	tattgattct	tgttcaaagt
5761	acacagtgg	cactgttttt	ctttgtttac	gagaatgctt	tcttgccatt	tactcttggt
5821	attatggcaa	ttgctgcatg	tgctatgctg	cttggttaagc	ataagcacgc	attcttgtgc
5881	ttgtttctgt	taccttctct	tgcaacagtt	gcttacttta	atatggtcta	catgcctgct
5941	agctgggtga	tgcgatcat	gacatggctt	gaattggctg	acactagctt	gtctgggtat
6001	aggcttaagg	attgtgttat	gtatgcttca	gctttagtgt	tgcttattct	catgacagct
6061	cgcactgttt	atgatgatgc	tgctagacgt	gtttggacac	tgatgaatgt	cattacactt
6121	gtttacaaa	tctactatgg	taatgcttta	gatcaagcta	tttccatgtg	ggccttagtt
6181	atttctgtaa	cctctaacta	ttctgggtgc	gttacgacta	tcatgttttt	agctagagct
6241	atagtgtttg	tgtgtgttga	gtattatcca	ttgttattta	ttactggcaa	caccttacag
6301	tgtatcatgc	ttgtttattg	tttcttaggc	tattgttgct	gctgctactt	tggecttttc
6361	tgtttactca	accgttactt	caggcttact	cttgggtgtt	atgactactt	ggtctctaca
6421	caagaattta	ggtatatgaa	ctcccagggg	cttttgcttc	ctaagagtag	tattgatgct
6481	ttcaagctta	acattaagtt	gttgggtatt	ggaggtaaac	catgtatcaa	ggttgctact
6541	gtacagtcta	aaatgtctga	cgtaaaagtgc	acatctgtgg	tactgctctc	ggttcttcaa
6601	caacttagag	tagagtcatc	ttctaaaattg	tgggcacaa	gtgtacaa	ccacaatgat
6661	attcttcttg	caaaaagacac	aactgaagct	ttcgagaaga	tggtttctct	tttgtctggt
6721	ttgctatcca	tgcaagggtgc	tgtagacatt	aatagggttg	gctgagaaat	gctcgataac
6781	cgtgctactc	ttcaggctat	tgcttcagaa	tttagttctt	taccatcata	tggcgcttat
6841	gccactgccc	aggaggccta	tgagcaggct	gtagctaata	gtgattctga	agtcgttctc
6901	aaaaagttaa	agaaatcttt	gaatgtggct	aaatctgagt	ttgaccgtga	tgctgccatg
6961	caacgcaagt	tggaaaagat	ggcagatcag	gctatgaccc	aaatgtacaa	acaggcaaga
7021	ctcaggagca	agagggccca	agtcgcttct	gctatgcaaa	caatgctctt	cactatgcta
7081	aggaagcttg	ataatgatgc	acttaacaac	attatcaaca	atgctgctga	tggttgtgtt
7141	ccactcaaca	tcataccatt	gactacagca	gccccaaactca	tggttgttgt	ccctgattat
7201	ggtacctaca	agaacacttg	tgatggtaac	acctttacat	atgcatctgc	actctgggaa
7261	atccagcaag	ttgttgatgc	ggatagcaag	attgttcaac	ttagtgaat	taacatggac
7321	aattcaccaa	atttggcttg	gcctcttatt	gttacagctc	taagagccaa	ctcagctggt

FIGURE 11C

7381	aaactacaga	ataatgaact	gagtccagta	gcactacgac	agatgtcctg	tgccggctggg
7441	accacacaaa	cagcttgtac	tgatgacaat	gcacttgcct	actataacaa	ttcgaaggga
7501	ggtaggtttg	tgctggcatt	actatcagac	caccaagatc	tcaaattgggc	tagattccct
7561	aagagtgatg	gtacaggtac	aatttacaca	gaactggaac	caccttgtag	gtttgttaca
7621	gacacaccaa	aagggcctaa	agtgaataac	ttgtacttca	tcaaaggctt	aaacaaccta
7681	aatagaggta	tgggtgctggg	cagtttagct	gctacagtac	gtcttcaggc	tggaaatgct
7741	acagaagtac	ctgccaattc	aactgtgctt	tccttctgtg	cttttgcagt	agaccctgct
7801	aaagcatata	aggattacct	agcaagtgga	ggacaaccaa	tcaccaactg	tgtgaagatg
7861	ttgtgtacac	acactggtag	aggacaggca	attactgtaa	caccagaagc	taacatggac
7921	caagagtcct	ttggtggtgc	ttcatgttgt	ctgtattgta	gatgccacat	tgaccatcca
7981	aatcctaaag	gattctgtga	cttgaaaggt	aagtacgtcc	aaatacctac	cacttgtgct
8041	aatgacccag	tgggtttttac	acttagaaac	acagtctgta	ccgtctgcgg	aatgtggaaa
8101	ggttatggct	gtagtgtgta	ccaactccgc	gaaccttga	tgcagtctgc	ggatgcatca
8161	acgtttttta	acgggtttgc	ggtgtaagt	cagcccgtct	tacaccgtgc	ggcacaggga
8221	ctagtactga	tgctgctac	agggcttttg	atatttacia	cgaaaaagtt	gctggttttg
8281	caaagttcct	aaaaactaat	tgctgtcgct	tccaggagaa	ggatgaggaa	ggcaattttat
8341	tagactctta	ctttgtagtt	aagaggcata	ctatgtctaa	ctaccaacat	gaagagacta
8401	tttataactt	ggttaaagat	tgtccagcgg	ttgctgtcca	tgactttttc	aagtttagag
8461	tagatgggtga	catggtagca	catatatcac	gtcagcgtct	aactaaatac	acaatggctg
8521	atttagtcta	tgctctacgt	cattttgatg	agggtaattg	tgatacatta	aaagaaatac
8581	tcgtcacata	caattgtctg	gatgatgatt	atttcaataa	gaaggattgg	tatgacttcg
8641	tagagaatcc	tgacatctta	cgcgatatgt	ctaacttagg	tgagcgtgta	cgccaatcat
8701	tattaaagac	tgtacaattc	tgcgatgcta	tgcgtgatgc	aggcattgta	ggcgtactga
8761	cattagataa	tcaggatctt	aatgggaact	ggtacgattt	cggtgatttc	gtacaagtag
8821	caccaggctg	cggagttcct	attgtggatt	catattactc	attgctgatg	cccacctca
8881	ctttgactag	ggcattggct	gctgagtccc	atatggatgc	tgatctcgca	aaaccactta
8941	tttaagtgga	tttgctgaaa	tatgatttta	cggaaagagag	actttgtctc	ttcgaccggt
9001	atttttaata	ttgggaccag	acataccatc	ccaattgtat	taactgtttg	gatgatagg
9061	gtatccttca	ttgtgcaaac	tttaatgtgt	tattttctac	tgtgtttcca	cctacaagtt
9121	ttggaccact	agtaagaaaa	atattttag	atggtgttcc	ttttgttgtt	tcaactggat
9181	accattttcg	tgagtttagga	gtcgtagata	atcaggatgt	aaacttacat	agctcgcgct
9241	tcagtttcaa	ggaactttta	gtgtatgctg	ctgatccagc	tatgcatgca	gcttctggca
9301	atttattgct	agataaacgc	actacatgct	tttcagtagc	tgactaaca	aacaatggtg
9361	cttttcaaac	tgtcaaaccc	ggtaatttta	ataaagactt	ttatgacttt	gctgtgtcta
9421	aaggtttcct	taaggaagga	agttctgttg	aactaaaaca	cttcttcttt	gctcaggatg
9481	gcaacgctgc	tatcagtgat	tatgactatt	atcgttataa	tctgccaaaca	atgtgtgata
9541	tcagacaact	cctattcgta	gttgaagttg	ttgataaata	ctttgattgt	tacgatgggtg
9601	gctgtattaa	tgccaaccaa	gtaatcgtta	acaatctgga	taaatcagct	ggtttcccat
9661	ttaataaaatg	gggtaaggct	agactttatt	atgactcaat	gagttatgag	gatcaagatg
9721	cacttttctgc	gtataactaag	cgtaatgtca	tccctactat	aactcaaatg	aatcttaagt
9781	atgccattag	tgcaaaagaat	agagctcgca	ccgtagctgg	tgtctctatc	tgtagtacta
9841	tgacaaatag	acagtttcat	cagaaattat	tgaagtcaat	agccgccact	agaggagcta
9901	ctgtggtaat	tggacaacagc	aagttttacg	gtggctggca	taatatgtta	aaaactgttt
9961	acagtgatgt	agaaaactcca	caccttatgg	gttgggatta	tccaaaatgt	gacagagcca
10021	tgccatacat	gcttaggata	atggcctctc	ttgttcttgc	tcgcaaacat	aacacttgct
10081	gtaactttatc	acaccgtttc	tacaggttag	ctaacgagtg	tgcgcaagta	ttaagtgaga
10141	tggtcatgtg	tggcggctca	ctatatgtta	aaccagggtg	aacatcatcc	ggtgatgcta
10201	caactgctta	tgctaatagt	gtctttaaca	tttgtcaagc	tggtacagcc	aatgtaaatg
10261	cacttctttc	aactgatgg	aataagatag	ctgacaagta	tgtccgcaat	ctacaacaca
10321	ggctctatga	gtgtctctat	agaaatagg	atgttgatca	tgaattcgtg	gatgagtttt
10381	acgcttacct	gcgtaaacat	ttctccatga	tgattctttc	tgatgatgcc	gttgtgtgct
10441	ataacagtaa	ctatgcggct	caaggttttag	tagctagcat	taagaacttt	aaggcagttc
10501	tttattatca	aaataatgtg	ttcatgtctg	aggcaaaatg	ttggac	

FIGURE 12A

1	attagcgata	tgtatgaccc	taggaccaaa	catgtgacaa	aagagaatga	ctctaaagaa
61	gggtttttca	cttatctgtg	tggatttata	aagcaaaaac	tagccctggg	tggttctata
121	gctgtaaaga	taacagagca	ttcttggaa	gctgaccttt	acaagcttat	gggccatttc
181	tcatggtgga	cagcttttgt	tacaaatgta	aatgcatcat	catcggaagc	atttttaatt
241	ggggctaact	atcttggcaa	gccgaaggaa	caaattgatg	gctataccat	gcatgctaac
301	tacattttct	ggaggaacac	aaatcctatc	cagttgtctt	cctattcact	ctttgacatg
361	agcaaatttc	ctcttaaatt	aaggggaact	gctgtaattg	ctcttaagga	gaatcaaact
421	aatgatatga	tttattctct	tctggaaaaa	ggtaggctta	tcattagaga	aaacaacaga
481	gttgtgggtt	caagtgatat	tcttgtaaac	aactaaacga	acatgtttat	tttcttatta
541	tttcttactc	tcactagtgg	tagtgacctt	gaccggtgca	ccacttttga	tgatgttcaa
601	gctcctaatt	acactcaaca	tacttcatct	atgagggggg	tttactatcc	tgatgaaatt
661	tttagatcag	acactcttta	tttaactcag	gattttatttc	ttccatttta	ttctaattgt
721	acagggtttc	atactattaa	tcatacgttt	ggcaaccctg	tcataccttt	taaggatggg
781	atattatttg	ctgccacaga	gaaatcaaat	gtgtgccgtg	gttgggtttt	tggttctacc
841	atgaacaaca	agtcacagtc	ggtgattatt	attagcaatt	ctactaatgt	tggtatacga
901	gcatgtaact	ttgaattgtg	tgacaaccct	ttctttgctg	tttctaaacc	catgggtaca
961	cagacacata	ctatgatatt	cgataatgca	tttaattgca	ctttcgagta	catactgat
1021	gccttttctg	ttgatgtttc	agaaaaagtc	ggtaatttta	aacacttacg	agagtttgtg
1081	tttaaaaaata	aagatgggtc	tctctatggt	tataagggct	atcaacctat	agatgtagtt
1141	cgtgatctac	cttctggttt	taacactttg	aaacctattt	ttaagttgcc	tcttgggtat
1201	aacattacaa	attttagagc	cattcttaca	gccttttcac	ctgctcaaga	catttggggc
1261	acgtcagctg	cagcctattt	tgttggctat	ttaaagccaa	ctacatttat	gctcaagtat
1321	gatgaaaatg	gtacaatcac	agatgctgtt	gattgctctc	aaaatccact	tgctgaactc
1381	aaatgctctg	ttaagagctt	tgagattgac	aaaggaattt	accagacctc	taatttcagg
1441	gttgttccct	caggagatgt	tgtgagattc	cctaataatta	caaacttgtg	tccttttggg
1501	gaggttttta	atgctactaa	attccctttc	gtctatgcat	gggagagaaa	aaaaatttct
1561	aattgtgttg	ctgattactc	tgtgctctac	aactcaacat	ttttttcaac	ttttaaagtc
1621	tatggcggtt	ctgccactaa	gttgaatgat	ctttgcttct	ccaatgtcta	tgcatattct
1681	tttgtagtca	agggagatga	tgtaagacaa	atagcgccag	gacaaactgg	tggtattgct
1741	gattataatt	ataaattgcc	agatgatttc	atgggttggt	tccttgcttg	gaatactggg
1801	aacattgatg	ctacttcaac	tggttaattat	gattataaat	ataggatatct	tagacatggc
1861	atgcttaggc	cctttgagag	agacatatct	aatgtgcctt	tctcccctga	tggcaaacct
1921	tgcaccccac	ctgctcttaa	ttgttattgg	ccattaaatg	attatggttt	ttacaccact
1981	actggcattg	gctaccaacc	ttacagagtt	gtagtacttt	cttttgtaact	ttttaaagca
2041	ccggccacgg	tttgtggacc	aaaattatcc	actgacctta	ttaagaacca	gtgtgtcaat
2101	tttaatttta	atggactcac	tggtactggg	gtgttaactc	cttcttcaaa	gagatttcaa
2161	ccatttcaac	aatttggccg	tgatgtttct	gatttcaactg	attccgttcg	agatcctaaa
2221	acatctgaaa	tattagacat	ttcaccttgc	tcttttgggg	gtgtaagtgt	aattacacct
2281	ggaacaaatg	cttcatctga	agttgctggt	ctatatcaag	atgttaactg	cactgatgtt
2341	tctacagcaa	ttcatgcaga	tcaactcaca	ccagcttggc	gcatatattc	tactggaaac
2401	aatgtattcc	agactcaagc	aggctgtctt	ataggagctg	agcatgtcga	cacttcttat
2461	gagtgcgaca	ttcctattgg	agctggcatt	tgtgctagtt	accatacagt	ttctttatta
2521	cgtagtacta	gccaaaaatc	tatttgggct	tatactatgt	ctttaggtgc	tgatagtcca
2581	attgcttact	ctaataaac	cattgtctata	cctactaact	tttcaattag	cattactaca
2641	gaagtaatgc	ctgtttctat	ggctaaaaac	tccgtagatt	gtaatatgta	catctgcgga
2701	gatttctactg	aatgtgctaa	tttgcctctc	caatatggta	gcttttgcac	acaactaaat
2761	cgtgcactct	caggtattgc	tgctgaacag	gatcgcaaca	cacgtgaagt	gttcgctcaa
2821	gtcaaacaaa	tgtacaaaac	cccaactttg	aaatattttg	gtggttttta	tttttcacaa
2881	atattacctg	accctctaaa	gccaaactaag	aggtctttta	ttgaggactt	gccctttaat
2941	aaggtgacac	tcgctgatgc	tggcttcatg	aagcaatatg	gcgaatgcct	aggtgatatt
3001	aatgctagag	atctcatttg	tgcgcagaag	ttcaatggac	ttacagtgtt	gccacctctg
3061	ctcactgatg	atatgatttg	tgctctcact	gtcgtctag	ttagtggtag	tccactgct
3121	ggatggacat	ttggtgctgg	cgctgctctt	caaatacctt	ttgctatgca	aatggcatat
3181	aggttcaatg	gcattggagt	tacccaaaat	gttctctatg	agaacccaaa	acaaatcgcc
3241	aaccaattta	acaaggcgat	tagtcaaatt	caagaatcac	ttacaacaac	atcaactgca
3301	ttgggcaagc	tgcaagacgt	tgtaaccag	aatgctcaag	cattaaacac	acttgtaaaa
3361	caacttagct	ctaattttgg	tgaattttca	agtgtgctaa	atgatatcct	ttcgcgactt
3421	gataaagtcg	aggcggaggt	acaaaattgac	aggttaatta	caggcagact	tcaagcctt
3481	caaacctatg	taacacaaca	actaatcagg	gctgctggaa	tcagggtctt	tgctaattct
3541	gctgctacta	aaatgtctga	gtgtgttctt	ggacaatcaa	aaagagttga	cttttgtgga
3601	aagggctacc	accttatgtc	cttcccacaa	gcagccccgc	atggtgttgt	cttcctacat

FIGURE 12B

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3661 gtcacgtatg tgccatccca ggagaggaac ttcaccacag cgccagcaat ttgtcatgaa
3721 ggcaaagcat acttccctcg tgaagggtgtt tttgtgttta atggcacttc ttggtttatt
3781 acacagagga acttcttttc tccacaaata attactacag acaatacatt tgtctcagga
3841 aattgtgatg tcgttattgg catcattaac aacacagttt atgacacctt gcaacctgag
3901 cttgactcat tcaaagaaga gctggacaag tacttcaaaa atcatacatc accagatggt
3961 gatcttggcg acatttcagg cattaacgct tctgtcgtca acattcaaaa agaaattgac
4021 cgcctcaatg aggtcgctaa aaattttaat gaatcactca ttgaccttca agaattggga
4081 aaatatgagc aatatattaa atggccttgg tatgtttggc tcggcttcat tgctggacta
4141 attgccatcg tcatggttac aatcttgctt tgttgcata ctagtgtgtg tagttgcctc
4201 aaggggtgat gctcttgtgg ttcttgcctc aagtttgatg aggatgactc tgagccagtt
4261 ctcaaggggtg tcaaattaca ttacacataa acgaacttat ggatttgttt atgagatttt
4321 ttactcttgg atcaattact gcacagccag taaaaactga caatgcttct cctgcaagta
4381 ctgttcatgc tacagcaacg ataccgctac aagcctcact ccctttcgga tggcttgta
4441 ttggcggttg atttcttgct gtttttcaga gcgctaccaa aataattgag ctcaataaaa
4501 gatggcagct agccctttat aagggttcc agttcatttg caatttactg ctgctatttg
4561 ttaccatcta ttcacatctt ttgcttgctg ctgcaggat ggaggcgcaa tttttgtacc
4621 tctatgcctt gatatacttt ctacaatgca tcaacgcatg tagaattatt atg
```


FIGURE 13

1	aaagaacctt	gcccatacag	aacatacagag	ggcaattcac	catttcaccc	tcttgctgac
61	aataaatttg	cactaacttg	cactagcaca	cactttgctt	ttgcttgctg	tgacgggtact
121	cgacatacct	atcagctgct	tgcaagatca	gtttcaccaa	aacttttcat	cagacaagag
181	gaggttcaac	aagagctcta	ctcgccactt	tttctcattg	ttgctgctct	agtattttta
241	atactttgct	tcaccattaa	gagaaagaca	gaatgaatga	gctcacttta	attgacttct
301	atttgtgctt	tttagccttt	ctgctattcc	ttgttttaat	aatgcttatt	atattttggg
361	tttctactga	aatccaggat	ctagaagaac	cttgtagcaa	agtctaaacg	aacatgaaac
421	ttctcattgt	tttgacttgt	atttctctat	gcagttgcat	atgcactgta	gtacagcgct
481	gtgcatctaa	taaaccctcat	gtgcttgaag	atccttgtaa	ggtacaacac	taggggtaat
541	acttatagca	ctgcttggct	ttgtgctcta	ggaaagggtt	taccttttca	tagatggcac
601	actatggttc	aaacatgcac	acctaattgt	actatcaact	gtcaagatcc	agctgggtgg
661	gcgcttatag	ctaggtgttg	gtaccttcat	gaaggctcacc	aaactgctgc	atthagagac
721	gtacttggtg	ttttaaataa	acgaacaaat	taaaatgtct	gataatggac	cccaatcaaa
781	ccaacgtagt	gcccccgca	ttacatttgg	tggaccaca	gattcaactg	acaataacca
841	gaatggagga	cgcaatgggg	caaggccaaa	acagcgccga	ccccaagggt	taccaataaa
901	tactgctgct	tgggttcacag	ctctcactca	gcatggcaag	gaggaactta	gattccctcg
961	aggccagggc	gttccaatca	acaccaatag	tgggtccagat	gaccaaattg	gctactaccg
1021	aagagctacc	cgacgagttc	gtggtgggtga	cggcaaaaatg	aaagagctca	gccccagatg
1081	gtacttctat	tacctaggaa	ctggcccaga	agcttcaact	ccctacggcg	ctaacaaaga
1141	aggcatcgta	tgggttgcaa	ctgagggagc	cttgaataca	cccaaagacc	acattggcac
1201	ccgcaatcct	aataacaatg	ctgccaccgt	gctacaactt	cctcaaggaa	caacattgcc
1261	aaaaggcttc	tacgcagagg	gaagcagagg	cggcagtcac	gcctcttctc	gctcctcatc
1321	acgtagtcgc	ggtaattcaa	gaaattcaac	tcctggcagc	agtaggggaa	attctcctgc
1381	tcgaatggct	agcggagggtg	gtgaaactgc	cctcgcgcta	ttgctgctag	acagattgaa
1441	ccagcttgag	agcaaaagttt	ctggtaaagg	ccaacaacaa	caaggccaaa	ctgtcactaa
1501	gaaatctgct	gctgaggcat	ctaaaaagcc	tcgccaaaaa	cgtacagcca	caaaacagta
1561	caacgtcact	caagcatttg	ggagacgtgg	tccagaacaa	acccaaggaa	atttcgggga
1621	ccaagaccta	atcagacaag	gaactgatta	caaacattgg	ccgcaaattg	cacaatttgc
1681	tccaagtgcc	tctgcattct	ttggaatgtc	acgcattggc	atggaagccg	caccttcggg
1741	aacatggctg	acttatcatg	gagccattaa	attggatgac	aaagatccac	aattcaaaga
1801	caacgtcata	ctgctgaaca	agcacattga	cgcatacaaa	acattcccac	caacagagcc
1861	taaaaaggac	aaaaagaaaa	agactgatga	agctcagcct	ttgccgcaga	gacaaaagaa
1921	gcagcccact	gtgactcttc	ttcctgcggc	tgacatggat	gatttctcca	gacaacttca
1981	aaattccatg	agtggagctt	ctgctgatgc	aaactcaggca	taaactctca	tgatgaccac
2041	acaaggcaga	tgggctatgt	aaacgttttc	gcaattccgt	ttacgataca	tagtctactc
2101	ttgtgcagaa	tgaattctcg	taactaaaca	gcacaagtag	gtttagttaa	ctttaatctc
2161	acatagcaat	ctttaatcaa	tgtgtaacat	tagggaggag	ttgaaagagc	caccacattt
2221	tcatcgaggc	cacgcggagt	acgatcgagg	gtacagtga	taatgctagg	gagagctgcc
2281	tatatggaag	agccctaata	tgta			

Figure 14A

1 caagctcttc aaaaccattg ttgagtcctg cggtaactat aaagttacca agggaaagcc
61 cgtaaaagggt gcttggaca ttggacaaca gagatcagtt ttaacaccac tgttgtgtt
121 tccctcacag gctgctgggt ttatcagatc aatttttgcg cgcacacttg atgcagcaaa
181 ccactcaatt cctgatttgc aaagagcagc tgtcaccata ctgatggta ttctgaaca
241 gtcattacgt ctgtcgcagc ccatggttta tacttcagac ctgctacca acagtgtcat
301 tattatggca tatgtaactg gtggtcttgt acaacagact tctcagtgtg tgtctaact
361 ttggggcact actgttga aaactcaggcc tatctttgaa tggattgagg cgaacttag
421 tgcaggaggt gaatttctca aggatgcttg ggagattctc aaatttctca ttacaggtgt
481 ttttgacatc gtcaagggtc aaatacaggt tgcctcagat aacatcaagg attgtgttaa
541 atgcttcatt gatgtgtta acaaggcact cgaagtgtgc attgatcaag tcactatcgc
601 tggcgcaaag ttgcgatcac tcaacttagg tgaagtcttc atcgctcaaa gcaagggact
661 ttaccgtcag tgtatactg gcaaggagca gctgcaacta ctatgcctc ttaaggcacc
721 aaaagaagta acctttcttg aaggtgattc acatgacaca gtacttacct ctgaggaggt
781 tgttctcaag aacggtgaac tcgaagcact cgagacgccc gttgatagct tcacaaatgg
841 agctatcgtt ggacaccag tctgtgttaa tggcctcatg ctcttagaga ttaaggacaa
901 agaacaatac tgcgcattgt ctctgtgtt actggctaca aacaatgtct ttcgtttaa
961 agggggtgca ccaattaaag gtgtaacctt tggagaagat actgtttggg aagttcaagg
1021 ttacaagaat gtgagaatca catttagct tgatgaacgt gttgacaaag tgcttaatga
1081 aaagtctct gctacactg ttgaatccgg taccgaagtt actgagtttg catgtgtgt
1141 agcagaggct gttgtgaaga cttacaacc agtttctgat ctcttaccac acatgggtat
1201 tgatcttgat gagggtgag tagctacatt ctactattt gatgatgctg gtgaagaaa
1261 cttttcatca cgtatgtatt gttcctttta cctccagat gaggaagaag aggacgatc
1321 agagtgtgag gaagaagaaa ttgatgaac ctgtgaacat gagtacggtg cagaggatga
1381 ttatcaaggt ctccctcttg aatttggtgc ctacgtgaa acagttcag ttgaggaaga
1441 agaagaggaa gactggcttg atgatactac tgagcaatca gagattgagc cagaaccaga
1501 acctacacct gaagaaccag ttaacagtt tactggttat ttaaaactta ctgacaatg
1561 tgccattaaa tgtttgaca ccgttaagga ggcacaaagt gctaactta tgggtattgt
1621 aaatgctgct aacatacacc tgaacatgg tgggtgtgta gcagggtcac tcaacaaggc
1681 aaccaatggt gccatgcaa aggagagtga tgattacatt aagctaatg gccctcttac
1741 agtaggaggg tcttgttgc ttctggaca taatcttct aagaagtgtc tgcattgtg
1801 tggacctaac ctaaatgcag gtgaggacat ccagcttctt aaggcagcat atgaaaatt
1861 caattcacag gacatcttac ttgcaccatt gttgtcagca ggcattttg gtgctaaacc
1921 acttcagctt ttacaagtgt gcgtgcagac ggttcgtaca caggtttata ttgcagtcaa
1981 tgacaaagct ctttatgagc aggttgtcat ggattatctt gataacctga agcctagagt
2041 ggaagcacct aaacaaggag agccacaaa cacagaagat tcaaaaactg aggagaaatc
2101 tgtcgtacag aagcctgtcg atgtgaagcc aaaaattaag gcctgcattg atagggttac
2161 cacaacactg gaagaaacta agtttcttac caataagtt ctctgtttg ctgatatcaa
2221 tggtaagctt taccatgatt ctcaaacat gcttagaggt gaagatatgt ctttcttga
2281 ggaggatgca cttacatgg taggtgatgt taccactagt ggtgatata cttgtgtgt
2341 aataccctcc aaaaaggctg gtggcactac tgagatgctc tcaagagctt tgaagaaagt
2401 gccagttgat gatatataa ccacgtaccc tggacaagga tgtgctggtt atacactga
2461 ggaagctaag actgctctta agaaatgcaa atctgcattt tatgtactac cticagaagc
2521 acctaatgct aaggaagaga ttctaggaac tgtatcctgg aatttgagag aaatgcttgc
2581 tcatgctgaa gaggcaagaa aattaatgcc tatatgcatg gatgttagag ccataatggc
2641 aaccatccaa cgtaagtata aaggagttaa aattcaagag ggcacgttg actatggtgt
2701 ccgattcttc ttittacta gtaaagagcc ttagcttctt attattacga agctgaactc
2761 tctaaatgag ccgcttgta caatgccaat tggttatgtg acacatggtt ttaacttga
2821 agaggctgcg cgctgtatgc gtctcttaa agctcctgcc gtagtgcag tatcaccac
2881 agatgctgtt actacatata atggatact cacttcgtca tcaagacat ctgaggagca
2941 cttttagtaa acagtttctt tggctgctc ttacagagat tggctctatt caggacagcg
3001 tacagagtta ggtgttgaat ttcttaagcg tggtgacaaa attgtgtacc acaccctgga

Figure 14B

3061 gagccccgtc gagtttcac ttgacgggtga ggttctttca cttgacaaac taaagagtct
3121 cttatccctg cgggagggtta agactataaa agtggtcaca actgtggaca acactaatct
3181 ccacacacag cttgtggata tgtctatgac atatggacag cagtttggtc caacatactt
3241 ggatgggtgt gatgttaca aaattaaacc tcatgtaaat catgagggtg agactttctt
3301 tgtactacct agtgatgaca cactacgtag tgaagctttc gagtactacc atactcttga
3361 tgagagtttt cttggtaggt acatgtctgc tttaaaccac acaaagaaat ggaaatttcc
3421 tcaagtgggt gggttaactt caattaaatg ggctgataac aattgttatt tgtctagtgt
3481 tttattagca cttcaacagc ttgaagtcaa attcaatgca ccagcacttc aagagg

FIGURE 15A

1 caaaataatg tgttcattgc ttaggcaaaa tgttgactg agactgacct tactaaagga
61 cctcacgaat ttgtctaca gcatacaatg ctagttaaac aaggagatga ttactgttac
121 ctgccttacc cagatccatc aagaatatta ggcgcaggct gttttgtcga tgatattgtc
181 aaaacagatg gtacacttat gattgaaagg ttcgtgtcac tggctattga tgcttacc
241 ctacaaaac atcctaatac ggagtatgt gatgtcttc acttgattt acaatacatt
301 agaaagtac atgatgagct tactggccac atgttgaca tgtatccgt aatgctaact
361 aatgataaca cctcacgga ctgggaacct gagtttatg aggtatgta cacaccacat
421 acagcttgc aggtgtagg tctgtgtga ttgtcaatt cacagacttc acttctgtgc
481 ggtgcctgta ttaggagacc actcctatgt tgcaagtgt gctatgacca tgcatttca
541 acatcacaca aattagtgtt gctgttaac ccctatgtt gcaatcccc aggtgtgat
601 gtcactgatg tgacacaact gtatctagga ggtatgagct attattgcaa gtcacataag
661 cctccatta gtttccatt atgtgcta ggtcagggtt ttggttata caaaaacaca
721 tgtgtaggca gtgacaatg cactgacttc aatgcgatg caacatgta ttgactaat
781 gctggcgtt acatactgc caacactgt actgagagac tcaagcttt cgcagcagaa
841 acgtcaaaag ccactgagga aacatttaag ctgtcatatg gtattgccac tgtacgcgaa
901 gtactctgc acagagaatt gcatcttca tgggagggtg gaaaacctag accaccattg
961 aacagaaact atgtcttac tggttaccgt gtaactaaa atagtaaagt acagattgga
1021 gactacacct ttgaaaaagg tgactatgt gatgtgtt tgtacagagg tactacgaca
1081 tacaagtga atgttggtga ttactttgt ttgacatct acactgtaat gccacttagt
1141 gcacttact tagtgccaca agagcactat gtgagaatta ctggcttga cccaacactc
1201 aacatctcag atgagtttc tagcaatgt gcaattatc aaaaggctcg catgcaaaag
1261 tactctacac tccaaggacc acctggtact ggtaagagtc atttgccat cggacttgc
1321 ctctattacc catctgctc catagtgtat acggcatgct ctcatgcagc tgttgatgcc
1381 ctatgtgaaa aggcattaaa atattgccc atagataaa gtagtagaat catacctgcg
1441 cgtgcgcgcg tagagtgtt tgataaattc aaagtgaatt caacactaga acagtatgt
1501 ttctgactg taaatgcatt gccagaaaca actgctgaca ttgtagtct tgaatgaatc
1561 tctatggcta ctaattaga ctgagtgt gtcaatgcta gactcgtgc aaaacactac
1621 gtctatattg gcgatctgc tcaattaca gcccccgca cattgctgac taaaggcaca
1681 ctagaaccag aatattttaa ttcatgtgc agacttatga aaacaatagg tccagacatg
1741 ttcttgtaa ctgtgcgcg ttgtcctgt gaaattgtg acactgtgag tcttttagt
1801 tatgacaata agctaaaagc acacaaggag aagtcagtc aatgctcaa aatgttctac
1861 aaagggtgta ttacacatga tgttcatct gcaatcaaca gacctcaat aggcgttga
1921 agagaatttc ttacacgcaa tctgcttg agaaaagctg ttttatctc acctataat
1981 tcacagaacg ctgtagcttc aaaaatcta ggattgccta cgcagactgt tgattcatc
2041 cagggttctg aatagacta tgcataatc acacaaacta ctgaacagc acactctgt
2101 aatgtcaacc gcttcaatgt ggctatcaca agggcaaaaa ttggcattt gtgcataatg
2161 tctgataggg atctttatga caaactgcaa ttacaagtc tagaaatacc acgtcgcaat
2221 gtggctacat tacaagcaga aaatgtaact ggactttta aggactgtag taagatcatt
2281 actggtctc atctacaca ggcacctaca cacctcagc ttgatataa gttcaagact
2341 gaaggattat gtgttgacat accaggcata ccaaaggaca tgacctaccg tagactcatc
2401 tctatgatgg gttcaaaaat gaattacca gtcaatggtt accctaata gtttacc
2461 cgcgaagaag ctattctca cgttcgtgc tggattggct ttgatgtaga gggctgtcat
2521 gcaactagag atgtgtggg tactaaccta cctctccagc taggatttc tacagggtt
2581 aacttagtag ctgtaccgac tggttatgt gactgaaa ataacacaga attcaccaga
2641 gttaatgaa aacctccacc aggtgaccag tttaaacatc ttataccact catgtataa
2701 ggcttgcctt ggaatgtagt gcttattaag atagtacaaa tgcctagtga tactgaaa
2761 ggattgtcag acagagtcgt gttcgtctt tgggcgcag gctttgagct tacatcaatg
2821 aagtacttg tcaagattg acctgaaaga acgtgtgtc tgtgtgaca acgtgcaact
2881 tgccttcta ctcatcaga tacttatgcc tgcgtgaac attctgtgg ttttgactat
2941 gtctataacc catttatgat tgatgtcag cagtggggct ttacgggtaa ccttcagagt
3001 aacctgacc aacattgcca ggtacatgga aatgcacatg tggctagtgt tgatgctatc

FIGURE 15B

3061 atgactagat gtttagcagt ccatgagtgc ttgttaagc gcgttgattg gtctgttgaa
3121 taccctatta taggagatga actgagggtt aattctgctt gcagaaaagt acaacacatg
3181 gttgtgaagt ctgcattgct tgctgataag ttccagttc ttcatgacat tggaaatcca
3241 aaggctatca agtgtgtgcc tcaggctgaa gtagaatgga agttctacga tgctcagcca
3301 ttagtgaca aagcttaca aatagaggaa ctcttctatt ctatgctac acatcacgat
3361 aaattcactg atgggtttg ttgttttg aattgtaacg ttgatcgta cccagccaat
3421 gcaattgtgt gtaggttga cacaagagtc ttgtcaact tgaactacc aggctgtgac
3481 ggtggtagtt tgatgtgaa taagcatgca ttccacactc cagcttcga taaaagtga
3541 ttactaatt taaagcaatt gcccttctt tactattctg atagtccttg tgagtctcat
3601 ggcaaacaag tagtgtcgga tattgattat gtccactca aatctgctac gtgtattaca
3661 ctagtcaatt taggtgtgc tgttgcaga caccatgcaa atgagtaccg acagtacttg
3721 gatgcataata atatgatgat ttctgctgga tttagcctat ggatttaca acaattgat
3781 acttataacc tgtggaatac attaccagg ttacagagtt tagaaaatgt ggctataat
3841 gttgtaata aaggacactt tgatggacac gccggcgaag cactgttctc catcataat
3901 aatgctgttt acacaaggt agatgggtatt gatgtggaga tctttgaaag taagacaaca
3961 ctctctgta atgttgcat tgagctttg gctaagcgta acattaacc agtgccagag
4021 attaagatac tcaataattt gggtgttgat atcgctgcta atactgtaat ctgggactac
4081 aaaagagaag cccagcaca tgtgtctaca ataggtgtct gcacaatgac tgacattgcc
4141 aagaaaccta ctgagagtgc ttgtcttca ctactgtct tgttgatgg tagagtggaa
4201 ggacaggtag accttttag aaacgccgt aatggtgtt taataacaga aggttcagtc
4261 aaagtctaa cacttcaaa gggaccagca caagctagcg tcaatggagt cacattaatt
4321 ggagaatcag taaaaacaca gttaactac ttaagaaag tagacggcat tattcaacag
4381 ttgctgaaa cctactttac tcagagcaga gacttagagg atttaagcc cagatcaca
4441 atggaaactg actttctga gctcgctatg gatgaattca tacagcgata taagctcgag
4501 ggctatgcct tcgaacacat cgtttatgga gatttcagtc atggacaact tggcggctt
4561 catttaatga taggcttagc caagcgctca caagattcac cacttaatt agaggatttt
4621 atccctatgg acagcacagt gaaaaattac ttcataacag atgcgcaaac aggttcatca
4681 aaatgtgtgc gttctgtgat tgatcttta cttagtgact ttgtcgagat aataaagtca
4741 caagatttgt cagtatttc aaaagtggc aaggttaca ttgactatgc tgaatttca
4801 ttcatgctt ggtgtaagga tggacatgtt gaaacctct acccaaaact acaagcaagt
4861 caagcgtggc aaccaggtgt tgcgatgcct aactgtaca agatgcaaag aatgcttctt
4921 gaaaagtgtg accttcagaa ttatggtgaa aatgctgta taccaaaagg aataatgatg
4981 aatgtcgcaa agtatactca actgtgtcaa tacttaata cacttacttt agctgtacc
5041 tacaacatga gagttattca ctttggtgct ggctctgata aaggagtgc accaggtaca
5101 gctgtgtcga gacaatggt gcccaactgg acactacttg tgcattcaga tcttaatgac
5161 ttgcttccg acgcagattc tactttaatt ggagactgtg caacagtaca tacggcta
5221 aatgggacc ttattattag cgatatgat gaccctagga cc

FIGURE 16

1 cactacttta tgatgccaac tactttgttt gctggcacac acataactat gactactgta
61 taccatataa cagtgtcaca gatacaattg tcgttactga aggtgacggc attcaacac
121 caaaactcaa agaagactac caaattgggtg gttattctga ggataggcac tcaggtgtta
181 aagactatgt cgttgtacat ggctatttca ccgaagtta ctaccagctt gagtctacac
241 aaattactac aaacactggt attgaaaatg ctacattctt catctttaac aagcttgta
301 aagaccacc gaatgtgcaa atacacacaa tcgacggctc ttcaggagtt gctaaccag
361 caatggatcc aatttatgat gagccgacga cgactactag cgtgcctttg taagcacaag
421 aaagtgagta cgaacttatg tactcattcg ttccggaaga aacaggtagc ttaatagta
481 atagcgtagt tcttttctt gccttcgtgg tattcttget agtcacacta gccatccta
541 ctgcgcttcg attgtgtcgc tactgctgca atattgtaa cgtgagtta gtaaaacaa
601 cggttacgt ctactcgcgt gtaaaaaac tgaactctcc tgaaggagtt cctgatcttc
661 tggctaaac gaactaacta ttattattat tctgtttgga actttaacat tgcttatcat
721 ggcagacaac ggtactatta ccgttgagga gcttaacaa ctcttgaac aatggaacct
781 agtaataggt ttctattcc tagcctggat tatgttacta caatttgctt attctaactg
841 gaacagggtt ttgtacataa taaagcttg tttcctctgg ctctgtggc cagtaacact
901 tgctgtttt gtgcttgctg ctgtctacag aattaattgg gtgactggcg ggattgcgat
961 tgcaatggct tgtattgtag gcttgatgtg gcttagctac ttcgttctt ccttcaggct
1021 gtttgcctgt acccgctcaa tgtggtcatt caaccggaa acaaacattc ttcccaatgt
1081 gcctctccgg gggacaattg tgaccagacc gctcatggaa agtgaacttg tcattggtgc
1141 tgtgatcatt cgtggctact tgcgaatggc cggacactcc ctaggggcgt gtgacattaa
1201 ggacctgcca aaagagatca ctgtggctac atcacgaacg ctttctatt acaaattagg
1261 agcgtcgcag cgtgtaggca ctgattcagg ttttctgca tacaaccgct accgtattgg
1321 aaactataaa tfaataacag accacgccgg tagcaacgac aatattgctt tgctagtaca
1381 gtaagtgaca acagatgttt catcttggtg acttccaggt tacaatagca gagatattga
1441 ttatcattat gaggacttcc aggattgcta tttggaatct tgacgttata ataagtcaa
1501 tagtgagaca attatttaag cctctaacta agaagaatta ttcggagtta gatgatgaag
1561 aacctatgga gtagattat ccataaaacg aacatgaaaa ttattctctt cctgacattg
1621 attgtattta catcttgcca gctatatcac tatcaggagt gtgtagagg tacgactgta
1681 ctactaaaag aaccttgccc atcagcaaca tacgagggca attcaccatt tcacctctt
1741 gctgacaata aatttgact aactgcact agcacacact ttgctttgc ttgtgctgac
1801 g

FIGURE 17

1 aaagaacctt gcccatcagc aacatacgag ggcaattcac catttacc ctttctgac
61 aataaatttg cactaacttg cactagcaca cactttgctt ttgcttgtc tgacggtact
121 cgacatacct atcagctgcg tgcaagatca gtttaccac aacttttcat cagacaagag
181 gaggttcaac aagagctcta ctgccactt ttctcattg ttgctgctct agtattttta
241 atactttgct tcaccattaa gaaaaagaca gaatgaatga gtcacttta attgacttct
301 atttgtgctt tttagccttt ctgctattcc ttgttttaaat aatgcttatt atattttggt
361 ttctactcga aatccaggat ctagaagaac ctgtaccaa agtctaaacg aacatgaaac
421 ttctcattgt ttgacttgt atttctctat gcagttgcat atgcactgta gtacagcgct
481 gtgcatctaa taaacctcat gtgcttgaag atccttgtaa ggtacaacac taggggtaat
541 acttatagca ctgcttggtt ttgtgctcta ggaagggtt taccttttca tagatggcac
601 actatggttc aaacatgcac acctaagtgt actatcaact gtcaagatcc agctggtggt
661 gcgcttatag ctagggtgtg gtaccttcat gaaggtcacc aaactgtgc atttagagac
721 gtacttgttg tttaataaa acgaacaaat taaaatgtct gataatggac cccaatcaaa
781 ccaacgtagt gcccccgca ttacatttgg tggaccacac gattcaactg acaataacca
841 gaatggagga cgcaatgggg caaggccaaa acagcgccga cccaagggt tacccaataa
901 tactgctct tggttcacag ctctactca gcatggcaag gaggaactta gattccctcg
961 aggccagggc gttccaatca acaccaatag tggccagat gaccaaattg gctactaccg
1021 aagagctacc cgacgaggtc gtggttggtga cggcaaatg aaagagctca gcccagatg
1081 gtacttctat tacctaggaa ctggcccaga agcttcaact ccctacggcg ctaacaaaga
1141 aggcacgta tgggttgcaa ctgagggagc ctggaataca ccaaagacc acattggcac
1201 ccgcaatcct aataacaatg ctgccaccgt gctacaactt cctcaaggaa caacattgcc
1261 aaaaggcttc tacgcagagg gaagcagagg cggcagtcac gcctcttctc gctctctac
1321 acgtagtcgc ggtaatcaaa gaaattcaac tcctggcagc agtaggggaa atttctctgc
1381 tcgaatggct agcggaggtg gtgaaactgc cctcgcgcta ttgctgctag acagattgaa
1441 ccagcttgag agcaaatgtt ctggtaaagg ccaacaacaa caaggccaaa ctgtactaa
1501 gaaatctgct gctgaggcat ctaaaaagcc tcgcaaaaaa cgtacagcca caaaacagta
1561 caacgtcact caagcatttg ggagacgtgg tccagaacaa acccaaggaa atttcgggga
1621 ccaagaccta atcagacaag gaactgatta caaacattgg ccgcaaattg cacaatttgc
1681 tccaagtgc tctgattctt ttggaatgtc acgcattggc atggaagccg caccttcggg
1741 aacatggctg acttatcatg gagccattaa attggatgac aaagatccac aattcaaaga
1801 caacgtcata ctgtgaaca agcacattga cgcatacaaa acattccac caacagagcc
1861 taaaaaggac aaaaagaaaa agactgatga agctcagcct ttgccgcaga gacaaaagaa
1921 gcagcccact gtgactcttc ttctgcggc tgacatggat gatttctca gacaactca
1981 aaattccatg agtggagctt ctgctgattc aactcaggca taaactca tgatgaccac
2041 acaaggcaga tgggctatgt aaacgtttc gcaattccgt ttacgataca tagtctactc
2101 ttgtgcagaa tgaattctcg taactaaaca gcacaagtag gtttagttaa ctttaattc
2161 acatagcaat ctttaataca tgtgtaacat tagggaggac ttgaaagagc caccacatt
2221 tcatcgaggc cagcgggagt acgatcgagg gtacagtga taatgctagg gagagctgcc
2281 tatatggaag agccctaag tgta

FIGURE 18A

1 caagtctttc aaaaccattg ttgagtcctg cggtaactat aaagttacca agggaaagcc
61 cgtaaaaggt gcttggaaca ttggacaaca gagatcagtt ttaacaccac tgtgtggttt
121 tccttcacag gctgctgggt ttatcagatc aatttttgcg cgcacacttg atgcagcaaa
181 ccactcaatt cctgatttgc aaagagcagc tgcaccata ctgtatggta ttctgaaca
241 gtcattacgt ctgtcgacg ccatggttta tacttcagac ctgctacca acagtgtcat
301 tattatggca tatgtaactg gtggctctgt acaacagact tctcagtggg tgtctaact
361 ttggggcact actgttga aaactcaggcc tatctttgaa tggattgagg cgaaacttag
421 tgcaggagtt gaatttctca aggatgcttg ggagattctc aaatttctca ttacagggtg
481 ttttgacatc gtcaaggggc aaatacaggt tgcttcagat aacatcaagg attgtgtaaa
541 atgttcatt gatgttgta acaaggcact cgaaatgtgc attgatcaag tcaactatgc
601 tggcgcaaag ttgcgatcac tcaacttagg tgaagtctc atcgtcaca gcaagggact
661 ttaccgtcag tgtatactg gcaaggagca gctgcaacta ctcatgcctc ttaaggcacc
721 aaaagaagta accttcttg aagggtatc acatgacaca gtacttacct ctgaggaggt
781 tgttctcaag aacgggtgaac tcgaagcact cgagacgccc gttgatagct tcacaaatgg
841 agctatcgtt ggcacaccag tctgtgtaaa tggcctcatg ctcttagaga ttaaggacaa
901 agaacaatac tgcgcattgt ctctgggtt actggctaca aacaatgtct ttgcctaaa
961 aggggggtgca ccaattaaag gtgtaacctt tggagaagat actgtttggg aagttcaagg
1021 ttacaagaat gtgagaatca cattgagct tgatgaacgt gttgacaaag tgcttaatga
1081 aaagtgtct gtctacactg ttgaatccgg taccgaagtt actgagttg catgtgtgt
1141 agcagaggct gttgtgaaga ctttacaacc agtttctgat ctcttacca acatgggtat
1201 tgatcttgat gagtggagtg tagctacatt ctactattt gatgatgctg gtgaagaaaa
1261 cttttcatca cgtatgtatt gttccttta cctccagat gaggaagaag aggacgatgc
1321 agagtgtgag gaagaagaaa ttgatgaaac ctgtgaacat gactacggtg cagaggatga
1381 ttatcaaggt ctccctctgg aatttggtgc ctacgtgaa acagttcgag ttgaggaaga
1441 agaagaggaa gactggctgg atgatactac tgagcaatca gagattgagc cagaaccaga
1501 acctacacct gaagaaccag ttaatcagtt tactgggtat taaaactta ctgacaatgt
1561 tgccattaaa tgtgttgaca ccgtaagga ggcacaaagt gctaactcta tggtgattgt
1621 aaatgtgct aacatacacc tgaacatgg tgggtgtgta gcagggtcac tcaacaaggc
1681 aaccaatgg gccatgcaaa aggagagtga tgattacatt aagctaaatg gccctcttac
1741 agtaggaggg tctgtttgc ttctggaca taactttgct aagaagtgc tgcattgtgt
1801 tggacctaac ctaaatgcag gtgaggacat ccagcttctt aaggcagcat atgaaaatt
1861 caattcacag gacatctac ttgcaccatt gttgcagca ggcatattg gtgctaaacc
1921 acttcagtct ttacaagtgt gcgtgcagac ggctctgaca caggtttata ttgcagtcaa
1981 tgacaaagct ctttatgagc aggtgtcat ggattatct gataacctga agcctagagt
2041 ggaagcacct aaacaagagg agccaccaa cacagaagat tccaaaactg aggagaaatc
2101 tgtctacag aagcctgtcg atgtgaagcc aaaaattaag gcctgcattg atgaggttac
2161 cacaacactg gaagaaacta agtttcttac caataagta ctctgtttg ctgatatcaa
2221 tggtaagctt taccatgatt ctcaaacat gcttagaggt gaagatatgt ctttcttga
2281 ggaggatgca cttacatgg taggtgatgt tatcactagt ggtgatatca ctgtgtgtg
2341 aataccctcc aaaaaggctg gtggcactac tgagatgctc tcaagagctt tgaagaaagt
2401 gccagtgat gagtatataa ccacgtacc tggacaagga tgtgtgtgtt atacattga
2461 ggaagctaag actgctctta agaaatgcaa atctgcatt tatgtactac cttcagaagc
2521 acctaatgct aaggaagaga ttctaggaac tgtatcctgg aatttgagag aaatgcttgc
2581 tcatgctgaa gaggcaagaa aattaatgcc tatatgcatg gatgttagag ccataatggc

FIGURE 18B

2641 aaccatccaa cgtaagtata aaggagttaa aattcaagag ggcacgttg actatggtgt
2701 ccgattcttc ttttatacta gtaaagagcc thtagcttct attattacga agctgaactc
2761 tctaaatgag ccgcttgatca caatgccaat tggttatgtg acacatggtt ttaatcttga
2821 agaggctgcg cgctgtatgc gttctcttaa agtcctgcc gtagtgcag tatcatcacc
2881 agatgctgtt actacatata atggatacct cacttcgtca tcaaagacat ctgaggagca
2941 cttttagtaa acagtttctt tggctggctc ttacagagat tggtcctatt caggacagcg
3001 tacagagtta ggtgttgaat ttcttaagcg tggtgacaaa attgtgtacc acaccctgga
3061 gagccccgtc gagtttcac ttgacgggtga ggttcttca cttgacaaac taaagagtct
3121 cttatccctg cgggagggtta agactataaa agtgttcaca actgtggaca acactaatct
3181 ccacacacag cttgtggata tgtctatgac atatggacag cagtttggc caacatactt
3241 ggatgggtgt gatgttacia aaattaaacc tcatgtaaat catgagggtta agactttctt
3301 tgtactacct agtcatgaca cactacgtag tgaagcttc gagtactacc atactcttga
3361 tgagagtttt cttggttagt acatgtctgc tttaaaccac acaaagaaat ggaaatttcc
3421 tcaagttggt ggtttaactt caattaaatg ggctgataac aattgttatt tgtctagtgt
3481 ttatttagca cttcaacagc ttgaagtcaa attcaatgca ccagcacttc aagagg

FIGURE 19

1 cactacttta tgatgccaac tactttgttt gctggcacac acataactat gactactgta
61 taccataataa cagtgtcaca gatacaattg tcgttactga aggtgacggc atttcaacac
121 caaaactcaa agaagactac caaattgggtg gttattctga ggataggcac tcagggtgta
181 aagactatgt cgttgtacat ggctatttca ccgaagtta ctaccagctt gagtctacac
241 aaattactac aaacactggt attgaaaatg ctacattctt catctttaac aagcttgta
301 aagaccacc gaatgtgcaa atacacacaa tcgacggctc ttcaggagtt gctaaccag
361 caatggatcc aatttatgat gagccgacga cgactactag cgtgccttg taagcacaag
421 aaagttagta cgaactatg tactcattcg ttcggaaga aacaggtagc ttaatagta
481 atagcgtagt tcttttctt gccttcgtgg tattcttgc agtcacacta gccatccta
541 ctgcgcttcg attgtgtcgc tactgctgca atattgtaa cgtgagtta gtaaaccaa
601 cggtttactg ctactcgcgt gttaaaaatc tgaactctcc tgaaggagtt cctgatcttc
661 tggctctaac gaactaacta ttattattat tctgtttgga actttaacat tgcttatcat
721 ggcagacaac ggtactatta ccgttgagga gcttaacaa ctctggaac aatggaacct
781 agtaaatagg ttctattcc tagcctggat tatgttacta caattgcct attctaactg
841 gaacagggtt ttgtacataa taaagcttg ttctctcgg ctcttggtgc cagtaacact
901 tgctgtttt gtgcttgctg ctgtctacag aattaattgg gtgactggcg ggattgcgat
961 tgcaatggct tgtattgtag gcttgatgtg gcttagctac ttcgttgctt ccttcaggct
1021 gtttgctcgt acccgctcaa tgtggtcatt caaccggaa acaaacattc ttcccaatgt
1081 gcctctccgg gggacaattg tgaccagacc gctcatggaa agtgaacttg tcattggtgc
1141 tgtgatcatt cgtggctact tgcgaatggc cggacactcc ctagggcgct gtgacattaa
1201 ggacctgcca aaagagatca ctgtggctac atcacgaacg ctttctatt acaaattagg
1261 agcgtcgcag cgtgtaggca ctgattcagg ttttgctgca tacaaccgct accgtattgg
1321 aaactataaa ttaataacag accacgccgg tagcaacgac aatattgctt tgctagtaca
1381 gtaagtgaca acagatgtt catctgttg acttccaggt tacaatagca gagatattga
1441 ttatcattat gaggacttc aggattgcta ttggaatct tgacgttata ataagtcaa
1501 tagtgagaca attatttaag cctctaacta agaagaatta ttcggagtt gatgatgaag
1561 aacctatgga gtagattat ccataaaacg aacatgaaaa ttattctctt cctgacattg
1621 attgtattta catctgcga gctatatcac tatcaggagt gtgttagagg tacgactgta
1681 ctactaaaag aaccttgccc atcagcaaca tacgagggca attcaccatt tcacctctt
1741 gctgacaata aattgcact aactgcact agcacacact ttgctttgc ttgtgctgac
1801 g

FIGURE 20

1 tctgtgtagc tgcgctcgg ctgcatgcct agtgcaccta cgcagtataa acaataataa
61 attttactgt cgttgacaag aaacgagtaa ctgcgccctc ttctgcagac tgcttacggt
121 ttctccgtg ttgcagtcga tcatcagcat acctagggtt cgtccgggtg tgaccgaaag
181 gtaagatgga gagccttggt ttggtgtca acgagaaaac acacgtccaa ctgagtttg
241 ctgtccttca ggttagagac gtgctagtc gtggcttcgg ggactctgtg gaagaggccc
301 tatcggaggc acgtgaacac ctcaaaaatg gcacttgtgg tctagtagag ctggaaaaag
361 gcgtactgcc ccagcttgaa cagccctatg tgttcattaa acgttctgat gccttaagca
421 ccaatcacgg ccacaaggct gttgagctgg ttgcagaaat ggacggcatt cagtacggct
481 gtacgggtat aacactggga gtactcgtgc cacatgtggg cgaaaccca attgcatacc
541 gcaatgttct tctcgttaag aacggttaata agggagccgg tggctatagc tatggcatcg
601 atctaaagtc ttatgactta ggtgacgagc ttggcactga tcccattgaa gattatgaac
661 aaaactggaa cactaagcat ggcagtgggt cactccgtga actcactcgt gagtcaatg
721 gaggtgtagt cactcgtat gtcgacaaca atttctgtgg ccagatggg taccctcttg
781 attgcatcaa agatttcta gcacgcgagg gcaagtcaat gtgactctt tccgaacaac
841 ttgattacat cgagtcgaag agaggtgtct actgctgccg tgaccatgag catgaaattg
901 cctggttcac tgagcgctct gataagagct gcgagcacca gacaccctc gaaattaaga
961 gtgccaagaa attgacact ttcaaagggg aatgccccaa gtttgtgtt cctcttaact
1021 caaaagtcaa agtcattcaa ccacgtgttg aaaagaaaa gactgagggt ttcatggggc
1081 gtatacgtc tgtgtaccct gttgcatctc cacaggagtg taacaatatg cactgtctc
1141 ccttgatgaa atgtaatcat tgcgatgaag ttcatggca gacgtgcgac ttctgaaag
1201 ccacttgtga acattgtggc actgaaaatt tagttattga aggacctact acatgtgggt
1261 acctacctac taatgctgta gtgaaaatgc catgtcctgc ctgtcaagac ccagagattg
1321 gacctgagca tagtgttgca gattatcaca accactcaaa cattgaaact cgactccgca
1381 agggaggtag gactagatgt ttggaggct gtgtgttgc ctatgttggc tgctataata
1441 agcgtgccta ctgggttctc cgtgctagtg ctgatattgg ctaggccat actggcatta
1501 ctgggtgaaa tgtggagacc ttgaatgagg atctcctga gatactgagt cgtgaacgtg
1561 ttaacattaa cattgttggc gattttcatt tgaatgaaga ggttgccatc attttggcat
1621 ctttctctgc ttctacaagt gcctttattg aactataaa gactcttgat tacaagtctt
1681 tcaaaacat tgttgagtcc tgcggt

FIGURE 21 (A)

1 agtgttttat tagcacttca acagcttgaa gtcaaattca atgcaccagc acttcaagag
61 gcttattata gagcccgctg tggatgatgct gctaactttt gtgcactcat actcgcttac
121 agtaataaaa ctgttggcga gcttgggtgat gtcagagaaa ctatgaccca tcttctacag
181 catgctaatt tggaaictgc aaagcgagtt ctaaatgtgg tgtgtaaaca ttgtggtcag
241 aaaactacta ccttaacggg ttagaagct gtgatgtata tgggtactct atcttatgat
301 aatcctaaga cagggtgttc cattccatgt gtgtgtggc gtgatgctac acaatatcta
361 gtacaacaag agtcttcttt ttttatgatg tctgcaccac ctgctgagta taaattacag
421 caaggtacat tcttatgtgc gaatgagtag actggttaact atcagtgtgg tcattacact
481 catataactg ctaaggagac cctctatcgt attgacggag ctacacctac aaagatgtca
541 gagtacaaag gaccagtac tgatgttttc tacaaggaaa catcttacac tacaaccatc
601 aagcctgtgt cgtataaact cgatggagtt acttacacag agattgaacc aaaattggat
661 ggggtattata aaaaggataa tgcttactat acagagcagc ctatagacct tgtaccaact
721 caaccattac caaatgcgag ttttgataat ttcaaactca catgttctaa cacaaaattt
781 gctgatgatt taaatcaaat gacaggcttc acaaagccag ctacacgaga gctatctgtc
841 acattcttc cagacttgaa tggcgatgta gtggctattg actatagaca ctattcagcg
901 agtttaaga aagggtgctaa attactgcat aagccaattg tttggcacat taaccaggct
961 acaaccaaga caacgttcaa accaaacact tgggttttac gttgtcttg gagtacaaag
1021 ccagtagata ctcaaattc attgaagtt ctggcagtag aagacacaca aggaatggac
1081 aatcttgctt gtgaaagta acaaccacc tctgaagaag tagtggaana tcttaccata
1141 cagaaggaag tcatagagtg tgacgtgaaa actaccgaag ttgtaggcaa tgcatactt
1201 aaaccatcag atgaaggtgt taaagtaaca caagagttag gtcagtagga tcttatggct
1261 gcttatgttg aaaacacaag cattaccatt aagaaccta atgagcttc actagccta
1321 ggtttaaaaa caattgccac tcatgttatt gctgcaatta atagtgttc ttggagtaaa
1381 attttggctt atgtcaaacc attcttaga caagcagcaa ttacaacatc aaattgcgct
1441 aagagattag cacaacgtgt gtttaacaat tatatgcctt atgtgtttac attattgttc
1501 caattgtgta cttttactaa aagtaccaat tctagaatta gagcttcact acctacaact
1561 attgctaaaa atagtgttaa gagtgtgct aaattatgtt tggatgccg cattaatat
1621 gtgaagtcac ccaaatcttc taaattgttc acaatcgta tgtggctatt gttgttaagt
1681 atttgcttag gtctctaat ctgtgtaact gctgctttg gtgtactctt atctaattt
1741 ggtgctcctt cttattgtaa tggcgtaga gaattgtatc ttaattcgtc taacgttact
1801 actatggatt tctgtgaagg tcttttctc tgcagcattt gtttaagtgg attagactcc
1861 ctgattctt atccagctct tgaaccatt cagggtgacg ttcatcgta caagctagac
1921 ttgacaatt taggtctggc cgctgagtg gtttggcat atatgtgtt cacaaaattc
1981 ttttattat taggtcttc agctataatg cagggtgtct ttggctattt tgctagtcac
2041 ttcatcgca attctggct catgtggtt atcattagta ttgtacaaat ggcaccggt
2101 tctgcaatgg ttaggatgta catctcttt gcttcttct actacatag gaagagctat
2161 gttcatatca tggatgggtg cactctctc acttgcatga tgtgctataa gcgcaatcgt
2221 gccacacgag ttgagtgtac aactattgtt aatggcatga agagatcttt ctatgtctat
2281 gcaaatggag gccgtggctt ctgcaagact cacaattgga attgtctcaa ttgtacaca
2341 ttttgcactg gtagtacatt cattagtgt gaagtgtc gtgattgtc actccagttt
2401 aaaagaccaa tcaaccctac tgaccagtca tegtatatg ttgatagtgt tctgtgaaa
2461 aatggcgcgc ttacacctca ctttgacaag gctgggtcaa agacctatga gagacatccg
2521 ctctcccat ttgtcaatt agacaattg agagctaaca aactaaagg ttactgcct
2581 attaatgta tagttttga tggcaagtcc aatgcgacg agtctgttc taagtctgt
2641 tctgttact acagtcagct gatgtgcaa cctattctgt tcttgacca agctcttgta
2701 tcagacgttg gagatagtag tgaagtttcc gtttaagatgt ttgatgctta tgtcgacac
2761 ttttcagcaa cttttagtgt tctatggaa aaacttaagg cactgttgc tacagctcac
2821 agcgagttag caaagggtgt agcttttagt ggtgtcctt ctacattcgt gtcagctgcc
2881 cgacaagggt ttgtgatac cgatgttgac acaaaggatg ttattgaatg tctcaactt
2941 tcacatcact ctgacttaga agtgacaggt gacagttgta acaatttcac gctcacctat
3001 aataagggtg aaaacatgac gccagagat ctggcgcat gtattgactg taatgcaagg

FIGURE 21 (B)

3061 catatcaatg cccaagtagc aaaaagtcac aatgtttcac tcatctggaa tgtaaaagac
3121 tacatgtctt tatctgaaca gctgcgtaaa caaatcgtgta gtgctgcaa gaagaacaac
3181 ataccittta gactaacttg tgctacaact agacagggtg tcaatgtcat aactactaaa
3241 atctcactca aggggtggtaa gattgttagt acttgittta aacttatgct taaggccaca
3301 ttattgtgcg ttctgtctgc attggtttgt tatatcgta tgccagtaca tacattgtca
3361 atccatgatg gttacacaaa tgaaatcatt ggttacaag ccattcagga tgggtcact
3421 cgtgacatca ttctactga tgattgttt gcaaataaac atgctggtt tgacgcatgg
3481 tttagccagc gtggtgggtc atacaaaaat gacaaaagct gccctgtagt agctgctatc
3541 attacaagag agattggtt catagtgcct ggcttaccgg gtactgtgt gagagcaatc
3601 aatggtgact tctgtcatt tctacctgt gtttttagt ctgttgcaa catttgctac
3661 acaccttcca aactcattga gtatagtgt ttgctacct ctgctgctg tctgtctgt
3721 gagggtacaa ttttaagga tgctatgggc aaacctgtgc catattgta tgactaat
3781 ttgctagagg gttctattc ttatagttag ctctgccag acactcgta tggcttatg
3841 gatggttcca tcatacagt tctaactac tacctggagg gttctgttag agtagtaaca
3901 acttttgatg ctgagtactg tagacatgt acatgcgaaa ggtagaagt aggtattgct
3961 ctatctacca gtggttagtg gtttctaata atgagcatt acagagctct atcaggagtt
4021 ttctgtggtg ttgatgcgat gaatcicata gtaacatct ttactcctt tgtgcaacct
4081 gtgggtgctt tagatgtgc tgcttcagta gtggctgggt gttatttgc catattggtg
4141 acttgctgct cctactactt tatgaaatc agacgtgtt ttggtgagta caaccatgtt
4201 gttgctgcta atgcacittt gttttgatg tctttacta tactctgtct ggtaccagct
4261 tacagcttgc tgcggggagt ctactcagtc tttacttgt acttgacatt ctatttcacc
4321 aatgatgtt cattcttggc tcaccttcaa tggtttgcca tgttttctcc tatttgctct
4381 ttttgataa cagcaatcta tgtattctg atttctctga agcactgcca ttggttttt
4441 aacaactatc ttaggaaaag agtcatgtt aatggagta catttagtac ctctgaggag
4501 gctgctttgt gtacctttt gctcaacaag gaaatgtacc taaaattgct tagcgagaca
4561 ctgttgccac ttacacagta taacaggat ctgtctctat ataacaagta caagtattc
4621 agtgagcct tagatactac cagctatctg gaagcagctt gctgccactt agcaaaggct
4681 cttaatgact tttagcaact aggtgctgat gttctctacc aaccaccaca gacatcaatc
4741 acttctgctg ttctgcagag tggttttagg aaaatggcat tccgctcagg caaagttaa
4801 ggggtcatgg tacaagtaac ctgtggaact acaactctta atggattgtg gttggatgac
4861 acagtatact gtccaagaca tgtcatttgc acagcagaag acatgcttaa tctaactat
4921 gaagatctgc tcatcgcaa atccaacct agctttcttg ttacggctgg caatgttcaa
4981 ctctgttga ttggccattc tatgcaaaa tgtctgcta ggcttaagt tgatactct
5041 aaccttaaga cacccaagta taaattgtc cgtatccaac ctggtcaaac attttcagtt
5101 ctagcatgct acaatggtc accatctggt gttatcagt gtccatgag acctaatac
5161 accattaaag gtttttctt taatggatca tgtggtagt tggttttaa cattgattat
5221 gattgctgt ctcttctgta tatgcatcat atggagctc caacaggagt acacgctgt
5281 accgacttag aaggtaaatt ctatggtcca ttgttgaca gacaaactgc acaggctgca
5341 ggtacagaca caaccataac attaaatgtt ttggcatggc tgtatgctgc tgttatcaat
5401 ggtgataggt ggtttcttaa tagattcacc actacttga atgactttaa ccttgtggca
5461 atgaagtaca actatgaacc ttgacacaa gatcatgtg acatattgg acccttttct
5521 gctcaaacag gaattgccgt cttagatatg tgtgctgct tgaagagct gctgcagaat
5581 ggtatgaatg gtcgtactat ccttggtagc actattttag aagatgagtt tacaccattt
5641 gatgttgta gacaatgctc tgggttacc ttccaaggta agttcaagaa aattgttaag
5701 ggcactcacc attgcatgct ttttaacttc ttgacatcac tattgattct tgttcaagt
5761 acacagtggc cactgtttt cttgtttac gagaatgct tcttgccatt tactcttgg
5821 attatggcaa tgctgcatg tgctatgctg cttgttaagc ataagcacgc attctgtgc
5881 ttgtttctg tacttctct tgcaacagtt gcttacttta atatggtcta catgcctgct
5941 agctgggtga tgcgtatcat gacatggctt gaattggctg acactagctt gtctgtttat
6001 aggttaagg attgtttat gtatgcttca gctttagtt ttcttattct catgacagct
6061 cgcactgtt atgatgatg tgctagacgt gtttgacac tgatgaatg cattacactt

FIGURE 21 (C)

6121 gtttacaaag tctactatgg taatgcttta gatcaagcta ttccatgtg ggccttagtt
6181 atttctgtaa cctctaacta ttctgggtgc gttacgacta tcatgtttt agctagagct
6241 atagtgtttg tgtgtgttga gtattatcca ttgtatttta ttactggcaa caccttacag
6301 tgtatcatgc ttgtttattg ttcttaggc tattgttgc gctgctactt tggccttttc
6361 tgtttactca accgttactt caggcttact ctgtgtgtt atgactactt ggtctctaca
6421 caagaattta ggtatatgaa ctcccagggg ctttgcctc ctaagagtag tattgatgct
6481 ttcaagctta acattaagtt gttgggtatt ggaggtaaac catgtatcaa ggttgctact
6541 gtacagtcta aaatgtctga cgtaaagtgc acatctgtgg tactgctctc ggttcttcaa
6601 caacttagag tagagtcac ttctaaattg tgggcacaa gtgtacaact ccacaatgat
6661 atttcttctg caaaagacac aactgaagct ttcgagaaga tggtttctct ttgtctgtt
6721 ttgctatcca tgcagggtgc ttagacatt aataggttgt gcgaggaaat gctcgataac
6781 cgtgctactc ttcaggctat tgcttcagaa tttagttctt taccatcata tgcgccttat
6841 gccactgccc aggaggccta tgagcaggct gtatctaag gtgattctga agtcgttctc
6901 aaaaagttaa agaaatctt gaatgtggct aaatctgagt ttgacctga tgcgccatg
6961 caacgcaagt tggaaaagat ggcagatcag gctatgacc aaatgtacaa acaggcaaga
7021 tctgaggaca agagggccca agtcgttct gctatgcaa caatgctct cactatgcta
7081 aggaagcttg ataagatgc acttaacaac attatcaaca atgcgcgtga tggttgtgtt
7141 cactcaaca tcataccatt gactacagca gccaaactca tggttgtgt ccttgattat
7201 ggtacctaca agaacttg tgatgtaac acctttacat atgcactgc actctgggaa
7261 atccagcaag ttgttgatgc gtagatgaag attgttcaac ttagtgaat taacatggac
7321 aattcacaa atttgcttg gcctcttatt gttacagctc taagagccaa ctacgtgtt
7381 aaactacaga ataataact gagtcagta gcactacgac agatgtctg tgcggctggt
7441 accacacaaa cagcttgatc tgatgacaat gcactgcct actatacaa ttcgaaggga
7501 ggtaggtttg tgctggcatt actacagac caccaagatc tcaaatgggc tagattccct
7561 aagagtgatg gtacaggtac aatttacaca gaactggaac cacttgtag gttgttaca
7621 gacacaccaa aagggcctaa agtgaatac ttgtactca tcaaggctt aaacaaccta
7681 aatagaggta tgggtctggg cagtttagct gctacagtac gtcttcaggc tggaaatgct
7741 acagaagtac ctgccaattc aactgtgctt tccttctgtg cttttcagt agacctgct
7801 aaagcatata aggattacct agcaagtga ggacaacaa tcaccaactg tgtgaagatg
7861 ttgtgtacac aactggtac aggacaggca attactgta caccagaagc taacatggac
7921 caagagctct ttgtgtgctc ttcatgtgt ctgtattga gatccacat tgaccatcca
7981 aatcctaaag gattctgtga ctgaaagg tagtacgtcc aaatacctac cacttgctc
8041 aatgaccag tgggttttac acttagaacc acagtctgta ccgtctcgg aatgtggaaa
8101 ggttatggct gtagttgtga ccaactccgc gaaccttga tgcagtctgc ggatgcata
8161 acgtttttaa acgggtttgc ggtgtaagt cagccctgtc tacacctgc ggcacaggca
8221 ctagtactga tgcgtctac agggctttg atatttaca cgaaaaagt gctggtttg
8281 caaagtctc aaaaactaat tgcgtcgtc tccaggagaa ggatgaggaa ggcaatttat
8341 tagactctta cttgtagtt aagaggcata ctatgctaa ctaccaacat gaagagacta
8401 ttataactt gggtaaagat tgcagcgg ttgctgtcca tgacttttc aagtttagag
8461 tagatggtga catggtacca catatatcac gtcagcgtc aactaaatac acaatggctg
8521 atttagtcta tgcctacgt cattttgat agggtaattg tgatacatta aaagaatac
8581 tcttcacata caattgctgt gatgatgatt attcaataa gaaggattgg tatgactcg
8641 tagagaatcc tgacatctta cgcgtatag ctaacttagg tgagcgtgta cgccaatcat
8701 tattaagac tgtacaattc tgcgatgcta tgcgtgatgc aggcattgta ggcgtactga
8761 cattagataa tcagatctt aatgggaact ggtacgatt cggtgatttc gtacaagtag
8821 caccaggctg cggagtctc attgtgatt catattactc attgctgatg cccatcctca
8881 ctttgactag ggcattggct gctgagtcct atatggatgc tgatctgca aaaccactta
8941 ttaagtggga ttgctgaaa tatgatttta cggaagagag actttgtctc ttcgacctt
9001 attttaata ttgggaccag acataccatc ccaattgtat taactgttg gatgataggt
9061 gtatcctca ttgtgcaaac tttaattgt tattttctac tgtgttcca cctacaagt
9121 ttggaccact agtaagaaaa atattgtag atggtgtcc ttgtgttt tcaactggat
9181 accattttc tgagttagga gtcgtacata atcaggatgt aaactacat agctcgcgtc

FIGURE 21 (D)

9241 tcagtttcaa ggaactttta gtgtatgctg ctgatccagc tatgcatgca gcttctggca
9301 atttattgct agataaacgc actacatgct tttcagtagc tgcactaaca aacaatgttg
9361 cttttcaaac tgtcaaaccc ggtaatttta ataaagactt ttatgacttt gctgtgtcta
9421 aaggtttctt taaggaagga agttctgttg aactaaaaca cttctctttt gctcaggatg
9481 gcaacgctgc tatcagtgat tatgactatt atcgttataa tctgccaaca atgtgtgata
9541 tcagacaact cctattcgta gttgaagttg ttgataaata ctttgattgt tacgatggtg
9601 gctgtattaa tgccaaccaa gtaatcgta acaatctgga taaatcagct gggttcccat
9661 ttaataaatg gggtaaggct agactttatt atgactcaat gagttatgag gatcaagatg
9721 cacttttcgc gtatactaag cgtaatgtca tccctactat aactcaaatg aatcttaagt
9781 atgccattag tgcaaagaat agagctcgca ccgtagctgg tgtctctatc tgtagtacta
9841 tgacaatatg acagtttcat cagaaattat tgaagtcaat agccgccact agaggagcta
9901 ctgtggtaat tggaacaagc aagttttacg gtggctggca taatatgta aaaactgttt
9961 acagtgatgt agaaactcca caccttatgg gttgggatta tccaaaatgt gacagagcca
10021 tgcctaacat gcttaggata atggcctctc ttgttcttgc tcgcaaacat aacacttgct
10081 gtaacttate acaccgttcc tacagggttag ctaacgagtg tgcgcaagta ttaagtgaga
10141 tggctatgtg tggcggctca ctatatgta aaccagggtg aacatcatcc ggtgatgcta
10201 caactgctta tgctaatagt gtccttaaca ttgtcaagc tgttacagcc aatgtaaatg
10261 cacttcttcc aactgatggt aataagatag ctgacaagta tgtccgcaat ctacaacaca
10321 ggctctatga gtgtctctat agaaataggg atgttgatca tgaattcgtg gatgagtttt
10381 acgcttacct gcgtaaacat ttctccatga tgattcttcc tgatgatgcc gttgtgtgct
10441 ataacagtaa ctatgcggct caaggtttag tagctagcat taagaacttt aaggcagttc
10501 ttattatca aaataatgtg ttcattgtct aggcaaaatg ttggac

FIGURE 22

1 gtaccttcat gaaggtcacc aaactgctgc atttagagac gtacttgttg ttttaataa
61 acgaacaaat taaatgtct gataatggac cccaatcaaa ccaacgtagt gcccccgca
121 ttacatttgg tggaccaca gattcaactg acaataacca gaatggagga cgcaatgggg
181 caaggccaaa acagcgccga cccaaggtt tacccaataa tactgcgtct tggttcacag
241 ctctcactca gcatggcaag gaggaactta gattccctcg aggccagggc gttccaatca
301 acaccaatag tggccagat gaccaaattg gctactaccg aagagctacc cgacgagttc
361 gtggtggtga cggcaaaatg aaagagctca gcccagatg gtacttctat tacctaggaa
421 ctggcccaga agcttcactt ccctacggcg ctaacaaaga aggcacgta tgggttgcaa
481 ctgagggagc cttgaataca ccaaagacc acattggcac ccgcaatcct aataacaatg
541 ctgccaccgt gctacaactt cctcaaggaa caacattgcc aaaaggcttc tacgcagagg
601 gaagcagagg cggcagtcga gcctcttctc gctcctcacc acgtagtgcg ggtaattcaa
661 gaaattcaac tcctggcagc agtaggggaa attctctgc tcgaatggct agcggagggtg
721 gtgaaactgc cctcgcgcta ttgctgctag acagattgaa ccagcttgag agcaaagttt
781 ctggtaaaagg ccaacaacaa caaggccaaa ctgtactaa gaaatctgct gctgaggcat
841 ctaaaaagcc tcgcaaaaaa cgtactgcca caaacagta caacgtcact caagcattt
901 ggagacgtgg tccagaacaa acccaaggaa attcggggga ccaagaccta atcagacaag
961 gaactgatta caaacattgg ccgcaaattg cacaatttgc tccaagtgc tctgcattct
1021 ttggaatgtc acgcattggc atggaagtca cacttcggg aacatggctg acttatcatg
1081 gagccattaa attgcatgac aaagatccac aattcaaaga caacgtcata ctgctgaaca
1141 agcacattga cgcatacaaa acattccac caacagagcc taaaaggac aaaaagaaaa
1201 agactgatga agctcagcct ttgccgcaga gacaaaagaa gcagcccact gtactcttc
1261 ttctgcggc tgacatggat gatttctcca gacaactca aaattccatg agtggagctt
1321 ctgctgattc aactcaggca taaacactca tgatgaccac acaaggcaga tgggctatgt
1381 aaacgttttc gcaattccgt ttacgataca tagtctactc ttgtgcagaa tgaattctg
1441 taactaaaca gcacaagtag gtttagttaa cttaatctc acatagcaat cttaataca
1501 tgtgtaacat tagggaggac ttgaaagagc caccacattt tcacgaggc cacgcggagt
1561 acgatcgagg gtacagtga taatgctagg gagagctgcc tatatggaag agccctaattg

FIGURE 23

MSDNGPQSNQRSAPRITFGGPTDSTDNNQNGGRNGARPKQRRPQGLPNNTASWFTALTQHGKEEL
RFPRGQGVPIINTNSGPDDQIGYYRRATRRVRGGDGKMKELSPRWYFYLLGTGPEASLPYGANKEG
IVWVATEGALNTPKDHIGTRNPNNNAATVLQLPQGTTLPKGFYAEGSRGGSQASSRSSSRSGNS
RNSTPGSSRGNSPARMASGGGETALALLLLDRLNQLESKVSGKGQQQQGQTVTKKSAAEASKKPR
QKRTATKQYNVTQAFGRRGPEQTQGNFGDQDLIRQGTDYKHWPQIAQFAPSASAFFGMSRIGMEV
TPSGTWLTYHGAIKLDDKDPQFKDNVILLNKHIDAYKTFPPTEPKDKKKKTDEAQPLPQRQKKQ
PTVTLLPAADMDDFSRQLQNSMSGASADSTQA

Figure 24

MSDNGPQSNQRSAPRITFGGPTDSTDNNQNGGRNGARPKQRRPQ
GLPNNTASWFTALTQHGKEELRFPRGQGVPIINTNSGPDDQIGYYRRATRVRGGDGKM
KELSPRWYFYLLGTGPEASLPYGANKEGIVWVATEGALNTPKDHIGTRNPNNNAATVL
QLPQGTTLPKG FYAEGSRGGSQASSRSSSRSGNSRNSTPGSSRGNSPARMASGGGET
ALALLLLDRLNQLESKVSGKGQQQQGQTVTKKSAAEASKKPRQKRTATKQYNVTQAFG
RRGPEQTQGNFGDQDLIRQGTDYKHWPQIAQFAPSASAFFGMSRIGMEVTPSGTWLTY
HGAIKLDDKDPQFKDNVILLNKHIDAYKTFPPTPEPKDKKKKTDEAQPLPQRQKKQPT
VTLLPAADMDDFSRQLQNSMSGASADSTQA

FIGURE 25

(A)

MSDNGPQSNQRSAPRITFGGPTDSTDNNQNGGRNGARPKQRRPQ
GLPNNTASWFTALTQHGKEELRFPRGQGVPIINTNSGPDDQIGYYRRATRVRGGDGKM
KELSPRWYFYLLGTGPEASLPYGANKEGIVWVATEGALNTPKDHIGTRNPNNNAATVL
QLPQGTTLPKGIFYAEGSRGGSQASSRSSSRSGNSRNSTPGSSRGNSPARMASGGGET
ALALLLLDRLNQLESKVSGKGQQQQGQTVTKKSAAEASKKPRQKRTATKQYNVTQAFG
RRGPEQTQGNFGDQDLIRQGTDYKHWPQIAQFAPSASAFFGMSRIGMEAAPSGTWLTY
HGAIKLDDKDPQFKDNVILLNKHIDAYKTFPPTPEPKDKKKKTDEAQPLPQRQKKQPT
VTLLPAADMDDFSRQLQNSMSGASADSTQA

(B)

MSDNGPQSNQRSAPRITFGGPTDSTDNNQNGGRNGARPKQRRPQ
GLPNNTASWFTALTQHGKEELRFPRGQGVPIINTNSGPDDQIGYYRRATRVRGGDGKM
KELSPRWYFYLLGTGPEASLPYGANKEGIVWVATEGALNTPKDHIGTRNPNNNAATVL
QLPQGTTLPKGIFYAEGSRGGSQASSRSSSRSGNSRNSTPGSSRGNSPARMASGGGET
ALALLLLDRLNQLESKVSGKGQQQQGQTVTKKSAAEASKKPRQKRTATKQYNVTQAFG
RRGPEQTQGNFGDQDLIRQGTDYKHWPQIAQFAPSASAFFGMSRIGMEAAPSGTWLTY
HGAIKLDDKDPQFKDNVILLNKHIDAYKTFPPTPEPKDKKKKTDEAQPLPQRQKKQPT
VTLLPAADMDDFSRQLQNSMSGASADSTQA

FIGURE 26

MSDNGPQSNQRSAPRITFGGPTDSTDNNQNGGRNGARPKQRRPQ
GLPNNTASWFTALTQHGKEELRFPRGQGVPIINTNSGPDDQIGYYRRATRVRGGDGKM
KELSPRWYFYLLGTGPEASLPYGANKEGIVWVATEGALNTPKDHIGTRNPNNNAATVL
QLPQGTTLPKGFYAEGSRGGSQASSRSSSRSGNSRNSTPGSSRGNSPARMASGGGET
ALALLLLDRLNQLESKVSGKGQQQQGQTVTKKSAAEASKKPRQKRTATKQYNVTQAFG
RRGPEQTQGNFGDQDLIRQGTDYKHWPQIAQFAPSASAFFGMSRIGMEVTPSGTWLTY
HGAIKLDDKDPQFKDNVILLNKHIDAYKTFPPTPEPKDKKKKTDEAQPLPQRQKKQPT
VTLLPAADMDDFSRQLQNSMSGASADSTQA

FIGURE 27

MFIFLLFLTTLTSGSDLDRCTTFDDVQAPNYTQHTSSMRGVYYPD
EIFRSDTLYLTQDLFLPFYSNVTGFHTINHTFGNPVIPFKDGIYFAATEKSNVVRGWV
FGSTMNNKSQSVIIINNSTNVVIRACNFELCDNPFFAVSKPMGTQTHMTIFDNAFNCT
FEYISDAFSLDVSEKSGNFKHLREFVFKNKDGFLYVYKGYQPIDVVRDLPSGFNTLKP
IFKLPLGINITNFRAILTAFSPAQDIWGTSAAYFVGYLKPTTFMLKYDENGITIDAV
DCSQNPLAELKCSVKSFEIDKGIYQTSNFRVVPSPGDVVRFPNITNLCPFGEVFNATKF
PSVYAWERKKISNCVADYSVLYNSTFFSTFKCYGVSATKLNLCFSNVYADSFVVKGD
DVRQIAPGQTGVIADYNYKLPDDFMGCVLAWNTRNIDATSTGNYNKYRYLRHGKLRP
FERDISNVPPSPDGKPCPPALNCYWPLNDYGFTTTGIGYQPYRVVLSFELLNAPA
TVCGPKLSTDLIKQCVNFNFNGLTGTGVLTTPSSKRFQPFQQFGRDVSDFTDSVRDPK
TSEILDISPSCSFGGVSVITPGTNASSEVAVLYQDVNCTDVSTAIHADQLTPAWRIYST
GNNVFQTQAGCLIGAHEVDTSYECDIPIGAGICASYHTVSLLRSTSQKSIVAYTMSLG
ADSSIAYSNNTIAIPTNFSISITTEVMPVSMAKTSVDCNMYICGDSTECANLLLQYGS
FCTQLNRALSGIAAEQDRNTREVFAQVKQMYKTPTLKYFGGFNFSQILPDPLKPTKRS
FIEDLLFNKVTLADAGFMKQYGECLGDINARDLICAQKFNGLTVLPPLLTDDMIAAYT
AALVSGTATAGWTFGAGAALQIPFAMQMAYRFNGIGVTQNVLYENQKQIANQFNKAIS
QIQESLTTTSTALGKLQDVVNQNAQALNTLVKQLSSNFGAISSVLNDILSRLDKVEAE
VQIDRLITGRLQSLQTYVTQQLIRAAEIRASANLAATKMSECVLGQSKRVDFCGKGYH
LMSFPQAAPHGVVFLHVTYVPSQERNFTTAPAIHEGKAYFPREGVVFVNGTSWFITQ
RNFFSPQIIITDNTFVSGNCDVVIGIINNTVYDPLQPELDSFKEELDKYFKNHTSPDV
DLGDISGINASVVNIQKEIDRLNEVAKNLNESLIDLQELGKYEQYIKWPWYVWLGFIA
GLIAIVMTILLCCMTSCCCLKGACSCGSCCKFDEDDSEPVLKGVKLHYT

FIGURE 28

MFIFLLFLTTLTSGSDLDRCTTFDDVQAPNYTQHTSSMRGVYYPD
EIFRSDTLYLTQDLFLPFYSNVTGFHTINHTFGNPVIPFKDGIYFAATEKSNVVRGWV
FGSTMNNKSQSVIIINNSTNVVIRACNFELCDNPFFAVSKPMGTQHTMIFDNAFNCT
FEYISDAFSLDVSEKSGNFKHLREFVFKNKDGFLYVYKGYQPIDVVRDLPSGFNTLKP
IFKLPLGINITNFRAILTAFSPAQDIWGTSAAYFVGYLKPTTFMLKYDENGITIDAV
DCSQNPALAEKCSVKSFEDKGIYQTSNFRVVPSPGDVVRFPNITNLCPFGEVFNATKF
PSVYAWERKKISNCVADYSVLNSTFFSTFKCYGVSATKLNDLCFSNVYADSFVVKGD
DVRQIAPGQTGVIADYNYKLPPDDFMGCVLAWNTRNIDATSTGNYNKYRYLRHGKLRP
FERDISNVPPSPDGKPCPPALNCYWPLNDYGFTTTGIGYQPYRVVLSFELLNAPA
TVCGPKLSTDLIKQCVNFNFNGLTGTGVLTTPSSKRFQPFQQFGRDVSDFTDSVRDPK
TSEILDISPCAFGGVSVITPGTNASSEVAVLYQDVNCTDVSTAIHADQLTPAWRIYST
GNNVFQTQAGCLIGAHEVDTSYECDIPIGAGICASYHTVSLLRSTSQKSIVAYTMSLG
ADSSIAYSNNTIAIPTNFSISITTEVMPVSMAKTSVDCNMYICGDSTECANLLLQYGS
FCTQLNRALSGIAAEQDRNTREVFAQVKQMYKTPTLKYFGGFNFSQILPDPLKPTKRS
FIEDLLFNKVTLADAGFMKQYGECLGDINARDLICAQKFNGLTVLPPLLTDDMIAAYT
AALVSGTATAGWTFGAGAALQIPFAMQMAYRFNGIGVTQNVLYENQKQIANQFNKAIS
QIQESLTTTSTALGKLQDVVNQNAQALNTLVKQLSSNFGAISSVLNDILSRLDKVEAE
VQIDRLITGRLQSLQTYVTQQLIRAAEIRASANLAATKMSECVLGQSKRVDFCGKGYH
LMSFPQAAPHGVVFLHVTYVPSQERNFTTAPAIHEGKAYFPREGVVFVNGTSWFITQ
RNFFSPQIIITDNTFVSGNCDVIGIINNTVYDPLQPELDSFKEELDKYFKNHTSPDV
DLGDISGINASVVNIQKEIDRLNEVAKNLNESLIDLQELGKYEQYIKWPWYVWLGFIA
GLIAIVMVTILLCCMTSCCCLKGACSCGSCCKFDEDDSEPVLKGVKLHYT

FIGURE 29

MFIFLLFLTTLTSGSDLDRCTTFDDVQAPNYTQHTSSMRGVYYPD
EIFRSDTLYLTLQDLFLPFYSNVTGFHTINHTFGNPVIPFKDGIYFAATEKSNVVRGWV
FGSTMNNKSQSVIIISNSTNVVIRACNFELCDNPFFAVSKPMGTQHTMIFDNAFNCT
FEYISDAFSLDVSEKSGNFKHLREFVFKNKDGSLYVYKGYQPIDVVRDLPSGFNTLKP
IFKLPLGINITNFRAILTAFSPAQDIWGTSAAYFVGYLKPTTFMLKYDENGITIDAV
DCSQNPALAEKCSVKSFEDKGIYQTSNFRVVPSPGDVVRFPNITNLCPFGEVFNATKF
PSVYAWERKKISNCVADYSVLYNSTFFSTFKCYGVSATKLNLCFSNVYADSFVVKGD
DVRQIAPGQTGVIADYNYKLPPDDFMGCVLAWNTGNIDATSTGNYDYKYRYLRHGKLRP
FERDISNVPPSPDGKPCPPALNCYWPLNDYGFTTTGIGYQPYRVVLSFELLNAPA
TVCGPKLSTDLIKNCVNFNFNGLTGTGVLTSSKRFQPFQQFGRDVSDFTDSVRDPK
TSEILDISPCSFGGVSVITPGTNASSEVAVLYQDVNCTDVSTAIHADQLTPAWRIYST
GNNVFQTQAGCLIGAEHVDTSYECDIPIGAGICASYHTVSLLRSTSQKSIVAYTMSLG
ADSSIAYSNNTIAIPTNFSISITTEVMPVSMAKTSVDCNMYICGDSTECANLLLQYGS
FCTQLNRALSGIAAEQDRNTREVFAQVKQMYKTPTLKYFGGFNFSQILPDPLKPTKRS
FIEDLPFNKVTLADAGFMKQYGECLGDINARDLICAQKFNGLTVLPPLLTDDMIAAYT
AALVSGTATAGWTFGAGAALQIPFAMQMAYRFNGIGVTQNVLYENQKQIANQFNKAIS
QIQESLTTTSTALGKLQDVVNQNAQALNTLVKQLSSNFGAISSVLNDILSRLDKVEAE
VQIDRLITGRLQSLQTYVTQQLIRAAGIRASANLAATKMSECVLGQSKRVDFCGKGYH
LMSFPQAAPHGVFLHVTYVPSQERNFTTAPAIHEGKAYFPREGVVFVNGTSWFITQ
RNFFSPQIIITDNTFVSGNCDVVIGIINNTVYDPLQPELDSFKEELDKYFKNHTSPDV
DLGDISGINASVVNIQKEIDRLNEVAKNLNESLIDLQELGKYEQYIKWPWYVWLGFIA
GLIAIVMVTILLCCMTSCCSCLKGACSCGSCCKFDEDDSEPVLKGVKLHYT

FIGURE 30

(A)

MADNGTITVEELKQLLEQWNLVIGFLFLAWIMLLQFAYSNNRNF
LYIIKLVFLWLLWPVTLACFVLAAYRINWVTGGIAIAMACIVGLMWLSYFVASFRLF
ARTRSMWSFNPETNILLNVPLRGTIVTRPLMESELVIGAVIIRGHLMAGHPLGRCDI
KDLPEITVATSRTLSTYYKLGASQRVGTDSGFAAYNRYRIGNYKLNTDHAGSNDNIAL
LVQ

(B)

MADNGTITVEELKQLLEQWNLVIGFLFLAWIMLLQFAYSNNRNF
LYIIKLVFLWLLWPVTLACFVLAAYRINWVTGGIAIAMACIVGLMWLSYFVASFRLF
ARTRSMWSFNPETNILLNVPLRGTIVTRPLMESELVIGAVIIRGHLMAGHSLGRCDI
KDLPEITVATSRTLSTYYKLGASQRVGTDSGFAAYNRYRIGNYKLNTDHAGSNDNIAL
LVQ

(C)

MADNGTITVEELKQLLEQWNLVIGFLFLAWIMLLQFAYSNNRNF
LYIIKLVFLWLLWPVTLACFVLAAYRINWVTGGIAIAMACIVGLMWLSYFVASFRLF
ARTRSMWSFNPETNILPNVPLRGTIVTRPLMESELVIGAVIIRGHLMAGHSLGRCDI
KDLPEITVATSRTLSTYYKLGASQRVGTDSGFAAYNRYRIGNYKLNTDHAGSNDNIAL
LVQ

(D)

MADNGTITVEELKQLLEQWNLVIGFLFLAWIMLLQFAYSNNRNF
LYIIKLVFLWLLWPVTLACFVLAAYRINWVTGGIAIAMACIVGLMWLSYFVASFRLF
ARTRSMWSFNPETNILPNVPLRGTIVTRPLMESELVIGAVIIRGHLMAGHSLGRCDI
KDLPEITVATSRTLSTYYKLGASQRVGTDSGFAAYNRYRIGNYKLNTDHAGSNDNIAL
LVQ

FIGURE 31

(A)

MYSFVSEETGTLIVNSVLLFLAFVVFLLVTLAILTALRLCAYCC
NIVNVSLVKPTVYVYSRVKNLNSSEGVPDLLV

(B)

MYSFVSEETGTLIVNSVLLFLAFVVFLLVTLAILTALRLCAYCC
NIVNVSLVKPTVYVYSRVKNLNSSEGVPDLLV

(C)

MYSFVSEETGTLIVNSVLLFLAFVVFLLVTLAILTALRLCAYCC
NIVNVSLVKPTVYVYSRVKNLNSPEGVPDLLV

(D)

MYSFVSEETGTLIVNSVLLFLAFVVFLLVTLAILTALRLCAYCC
NIVNVSLVKPTVYVYSRVKNLNSPEGVPDLLV

(E)

MYSFVSEETGTLIVNSVLLFLAFVVFLLVTLAILTALRLCAYCC
NIVNVSLVKPTVYVYSRVKNLNSSEGVPDLLV

FIGURE 32 (A)

MESLVLGVNEKTHVQLSLPVLQVRDVLVRGFGDSVEEALSEARE
HLKNGTCGLVELEKGVLPQLEQPYVFIKRSDALSTNHGHKVVELVAEMDGIQYGRSGI
TLGVLVPHVGETPIAYRNVLLRKNGKNGAGGHSYGIDLKSYDLGDELGTDPIEDYEQN
WNTKHGSGALRELTRELNGGAVTRYVDNNFCGPDGYPLDCIKDFLARAGKSMCTLSEQ
LDYIESKRGVYCCRDHEHEIAWFTERSDKSYEHQTPFEIKSAKKFDTFKGECPKFVFP
LNSKVKVIQPRVEKKKTEGFMGRIRSVYPVASPQECNNMHLSTLMKCNHCDEVSWQTC
DFLKATCEHCGTENLVIEGPTTCGYLPTNAVVKMPCPACQDPEIGPEHSVADYHNHNSN
IETRLRKGGRTRCFGGCVFAYVGCYNKRAYWVPRASADIGSGHTGITGDNVETLNEDL
LEILSRERNINIVGDFHLNEEVAILASFSASTSFAFIDTIKSLDYKSFKTIVESCGN
YKVTKGKPVKGAWNIGQQRSVLTPLCGFPSQAAGVIRSIFARTLDAANHSIPDLQRAA
VTILDGISEQSLRLVDAMVYTSDLLTNSVIMAYVTGGLVQQT SQWLSNLLGTTVEKL
RPIFEWIEAKLSAGVEFLKDAWEILKFLITGVFDIVKGQIQVASDNIKDCVKCFIDVV
NKALEMCIDQVTIAGAKLRSLNLGEVFIAQSKGLYRQCIRGKEQLQLLMPLKAPKEVT
FLEGDSHDTVLTSEEVLKNGELEALETPVDSFTNGAIVGTPVCVNGLMLEIKDKEQ
YCALSPGLLATNNVFRCLKGGAPIKGVTFGEDTVWEVQGYKNVRITFELDERVDKVLNE
KCSVYTVESGTEVTEFACVVAEAVVKTLQPVSDLLTNMGIDLDEWSVATFYLFDDAGE
ENFSSRMYSFYPPDEEEEDDAECEEEI DETCEHEYGTEDDYQGLPLEFGASAETVR
VEEEEEEDWLDDTTEQSEIEPEPEPTPEEPVNQFTGYLKLTDNVAIKCVDIVKEAQSA
NPMVIVNAANIHLKHGGVAGALNKATNGAMQKESDDYIKLNGPLTVGGSCLLSGHNL
AKKCLHVVGPNLNAGEDIQLLKAAYENFNSQDILLAPLLSAGIFGAKPLQSLQVCVQT
VRTQVYIAVNDKALYEQVVM DYLDNLKPRVEAPKQEEPPNTEDSKTEEKSVVQKPVDV
KPKIKACIDEVTTTLEETKFLT NKLLL FADINGKLYHDSQNMLRGEDMSFLEKDAPYM
VGDVITSGDITCVVIPSKKAGGTTEMLSRALKKVPVDEYITTYPGQGCAGYTL EEAKT
ALKKCKSAFYVLPSEAPNAKEEILGTVSWNLREMLAHAEETRKLMPICMDVRAIMATI
QRKYKGIKIQEGIVDYGVRFFFYTSKEPVASII TKLNSLNEPLVTMPIGYVTHGFNLE
EAARCMRSLKAPAVVSVSSPDAVTTYNGYLTSSSKTSEEHFVETVSLAGSYRDWSYSG

FIGURE 32 (B)

QRTELGVEFLKRGDKIVYHTLESPVEFHLDGEVLSLDKLSLLSLREVKTIKVFTTVD
NTNLHTQLVDMSMTYGQQFGPTYLDGADVTKIKPHVNHEGKTFFVLPSDDTLRSEAFE
YYHTLDESFLGRYMSALNHTKKWKFPQVGGLTSIKWADNNCYLSSVLLALQQLEVKFN
APALQEAYYRARAGDAANFCALILAYSNKTVGELGDVRETMTHTLLQHANLES AKRVLN
VVCKHCGQKTTTTLTGVEAVMYMGTLSDNLKTGVSI PCVCGRDATQYLVQQESSFVMM
SAPPAEYKLQQGTFLCANEYTGNYQCGHYTHITAKETLYRIDGAHLTKMSEYKGPVTD
VFYKETS YTTTTIKPVSYKLDGVTYTEIEPKLDGYKKNAYYTEQPIDLVP TQPLPNA
SFDNFKLTC SNTKFADDLNQMTGFTKPASRELSVTFFPDLNGDVVAIDYRHYSASFKK
GAKLLHKPIVWHINQATTKTTFKPNTWCLRCLWSTKPVDTSNSFEVLAVEDTQGM DNL
ACESQQPTSEEVVENPTIQKEVIECDVKTTEVVG NVILKPSDEGVKVTQELGHEDLMA
AYVENTSITIKKPNELSLALGLKTIATHGIAAINSVPWSKILAYVKPFLGQAAITSN
CAKRLAQRVFNNYMPYVFTLLFQLCTFTKSTNSRIRASLPTTI AKNSVKSVAKLCLDA
GINYVKSPKFSKLFTIAMWLLLLSICLGLS LICVTAAGVLLSNFGAPSYCNGVRELYL
NSSNVTTMDFCEGSFPCSI CLSGLDSLDSYPALETIQVTISSYKLDLTILGLAAEWVL
AYMLFTKFFYLLGLSAIMQVFFGYFASHFISNSWLMWFIISIVQMAPVSAMVRMYIFF
ASFYYIWKSYVHIMDGCTSSTCMMCYKRN RATRVECTTIVNGMKRSFYVYANGGRGFC
KTHNWNCLNCDTFCTGSTFISDEVARDLSLQFKRPINPTDQSSYIVDSVAVKNGALHL
YFDKAGQKTYERHPLSHFVNLDNLRANNTKGSLPINVIVFDGKSKCDESASKSASVYY
SQLMCQPILLLDQVLVSDVDGSTEVSVKMFDAYVDTF SATFSVPMEKLKALVATAHSE
LAKGVALDGVLSTFVSAARQGVVD TDVDTKDVIECLKLSHHS DLEVTGDSCNNFMLTY
NKVENMTPRDLGACIDCNARHINAQVAKSHNVSLIWNVKDYMSLSEQLRKQIRSAKK
NNIPFRLTCATTRQVNVITTKISLKG GKI VSTCFKLMLKATLLCVLAALVCYIVMPV
HTLSIHDGYTNEIIGYKAIQDGVTRDIISTDDCFANKHAGFDAWFSQRGGSYKNDKSC
PVVAAIITREIGFIVPGLPGTVLR AINGDFLHFLPRVFS AVGNICYTPSKLIEYSDFA
TSACVLAAECTIFKDAMGKVPYCYDTNLLEGSISYSELRPDTRYVLMDGSIIQFPNT
YLEGSRVVTTFDAEYCRHGTCERSEVGICLSTSGRWVLNNEHYRALSGVFCGV DAMN

FIGURE 32 (C)

LIANIFTPLVQPVGALDVSASVVAGGIIAILVTCAAYYFMKFRRVFGYENHVVAANAL
LFLMSFTILCLVPAYSFLPGVYSVFYLYLTFYFTNDVSFLAHLQWFAMFSPIVPFWIT
AIYVFCISLKHCHWFFNNYLKRVMFNGVTFSTFEEAALCTFLLNKEMYLKLRSETLL
PLTQYNRYLALYNKYKYFSGALDTSYREAACCHLAKALNDFSNSGADVLYQPPQTSI
TSAVLQSGFRKMAFPPSGKVEGCMVQVTCGTTTLNGLWLDDTVYCPRHVICTAEDMLNP
NYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQNCLLRLKVDTSNPKTPKYKFVRIQPGQ
TFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGSCGSGVFNIDYDCVSFCYMHMELP
TGVHAGTDLEGKFYGPVDRQTAQAAGTDTTITLNLAWLYAAVINGDRWFLNRFTTT
LNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDMCAALKELLQNGMNGRTILGS
TILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTFLTSLILVQSTQWSLFFF
VYENAFLPFTLGIMAIAACAMLLVKHKHAFCLCLLPSLATVAYFNMVYMPASWVMRI
MTWLELADTSLSGYRLKDCVMYASALVLLILMTARTVYDDAARRVWTLNMNITLVYKV
YYGNALDQAISMWALVISVTSNYSGVVTTIMFLARAIVFVCVEYYPLLFITGNTLQCI
MLVYCFLGYCCCCYFGLFCLLNRYFRLTLGVYDYLVSSTQEFYRMYNSQGLLPKSSIDA
FKLNIKLLGIGGKPCIKVATVQSKMSDVKCTSVVLLSVLQQLRVSSSKLWAQCVQLH
NDILLAKDTTEAFEKMSVLLSVLLSMQGAVDINRLCEEMLDNRATLQAIASEFSSLPS
YAAAYATAQEAYEQAVANGDSEVVLLKKLKKSLNVAKSEFDRDAAMQRKLEKMAHQAMTQ
MYKQARSEDKRAKVTSAMQTMFTMLRKLNDALNNIINNARDGCVPLNIIPLTAAK
LMVVVPDYGTYNKTCDGNTFTYASALWEIQQVVDADSKIVQLSEINMDNSPNLAWPLI
VTALRANSVAVKLQNNELSPVALRQMSCAAGTTQTACTDDNALAYNNNSKGGRFVLALL
SDHQDLKWARFPKSDGTGTIYTELEPPCRFVTDTPKGPKVKYLYFIKGLNNLNRMV
GSLAATVRLQAGNATEVPANSTVLSFCAFAVDPAKAYKDYLASGGQPITNCVKMLCTH
TGTGQAITVTPEANMDQESFGGASCCLYCRCHIDHPNPKGFCDLKGKYVQIPTTCAND
PVGFTLRNTVCTVCGMWKGYGCSCDQLREPLMQSADASTFLNGFAV

FIGURE 33 (A)

MESLVLGVNEKTHVQLSLPVLQVRDVLVRGFGDSVEEALSEARE
HLKNGTCGLVELEKGVLPQLEQPYVFIKRSDALSTNHGHKVVELVAEMDGIQYGRSGI
TLGVLVPHVGETPIAYRNVLLRKNGNKGAGGHSYGIDLKSYDLGDELGTDPIEDYEQN
WNTKHGSGALRELTRELNGGAVTRYVDNNFCGPDGYPLDCIKDFLARAGKSMCTLSEQ
LDYIESKRGVYCCRDHEHEIAWFTERSDKSYEHQTPFEIKSAKKFDTFKGECPKFVFP
LNSKVKVIQPRVEKKKTEGFMGRIRSVYPVASPQECNNMHLSTLMKCNHCDEVSWQTC
DFLKATCEHCGTENLVIEGPTTCGYLPTNAVVKMPCPACQDPEIGPEHSVADYHNHSN
IETRLRKGGRTRCFGGCVFAYVGCYNKRAYWVPRASADIGSGHTGITGDNVETLNEDL
LEILSRERNINIVGDFHLNEEVAILASFSASTSFAFIDTIKSLDYKSFKTIVESCGN
YKVTKGKPVKGAWNIGQQRSVLTPLCGFPSQAAGVIRSI FARTLDAANHSI PDLQRAA
VTILDGISEQSLRLVDAMVYTSDLLTNSVIIMAYVTGGLVQQT SQWLSNLLGTTVEKL
RPIFEWIEAKLSAGVEFLKDAWEILKFLITGVFDIVKGQIQVASDNIKDCVKCFIDVV
NKALEMCIDQVTIAGAKLRSLNLGEVFIAQSKGLYRQCIRGKEQLQLLMPLKAPKEVT
FLEGDSHDTVLTSEEVLKNGELEALETPVDSFTNGAIVGTPVCVNGLMLEIKDKEQ
YCALSPGLLATNNVFRCLKGGAPIKGVTFGEDTVWEVQGYKNVRITFELDERVDKVLNE
KCSVYTVESGTEVTEFACVVAEAVVKTLQPVSDLLTNMGIDLDEWSVATFYLFDDAGE
ENFSSRMYSFYPPDEEEEDDAECEEEEIDETCEHEYGTEDDYQGLPLEFGASAETVR
VEEEEEEDWLDTTTEQSEIEPEPEPTPEEPVNQFTGYLKLTDNVAIKCVDIVKEAQSA
NPMVI VNAANIHLKHGGGVAGALNKATNGAMQKESDDYIKLNGPLTVGGSCLLSGHNL
AKKCLHVVGPNLNAGEDIQLLKAAYENFNSQDILLAPLLSAGIFGAKPLQSLQVCVQT
VRTQVYIAVNDKALYEQVVM DYLDNLKPRVEAPKQEPPNTEDSKTEEKSVVQKPVDV
KPKIKACIDEVTTTTLEETKFLTNKLLL FADINGKLYHDSQNMLRGEDMSFLEKDAPYM
VGDVITSGDITCVVIPSKKAGGTTEMLSRALKKVPVDEYITTYPGQGCAGYTL EEAKT
ALKKCKSAFYVLPSEAPNAKEEILGTVSWNLREMLAHAEETRKLMPICMDVRAIMATI
QRKYKGIKIQEGIVDYGVRFFFYTSKEPVASIITKLNSLNEPLVTMPIGYVTHGFNLE
EAARCMRSLKAPAVVSVSSPDAVTTYNGYLTSSSKTSEEHFVETVSLAGSYRDWSYSG

FIGURE 33 (B)

QRTELGVEFLKRGDKIVYHTLESPVEFHLDGEVLSLDKLSLLSLREVKTIKVFTTVD
NTNLHTQLVDMSTYGGQFGPTYLDGADVTKIKPHVNHEGKTFFVLPSDDTLRSEAFE
YYHTLDESFLGRYMSALNHTKKWKFPQVGGLTSIKWADNNCYLSSVLLALQQLEVKFN
APALQEAYYRARAGDAANFCALILAYSNKTVGELGDVRETMTHTLLQHANLES AKRVLN
VVCKHCGQKTTTTLTGVEAVMYMGTLSDNLKTGVSI PCVCGRDATQYLVQQESSFVMM
SAPPAEYKLQQGTFLCANEYTGNYQCGHYTHITAKETLYRIDGAHLTKMSEYKGPVTD
VFYKETS YTTTTIKPVSYKLDGVTYTEIEPKLDGYKKDNAYYTEQPIDLVP TQPLPNA
SFDNFKLTC SNTKFADDLNQMTGFTKPASRELSVTFFPDLNGDVVAIDYRHYSASFKK
GAKLLHKPIVWHINQATTKTTFKPNTWCLRCLWSTKPVDTSNSFEVLAVEDTQGM DNL
ACESQQPTSEEVVENPTIQKEVIECDVKTTEVVG NVILKPSDEGVKVTQELGHEDLMA
AYVENTSITIKKPNELSLALGLKTIATHGIAAINSVPWSKILAYVKPFLGQAAITTSN
CAKRLAQRVFN NYMPYVFTLLFQLCTFTKSTNSRIRASLPTTI AKNSVKSVAKLCLDA
GINYVKSPKFSKLFTIAMWLLLLSICLGLS LICVTAAGVLLSNFGAPSYCNGVRELYL
NSSNVTTMDFCEGSFPCSI CLSGLDSLDSYPALETIQVTISSYKLDLTILGLAAEWVL
AYMLFTKFFYLLGLSAIMQVFFGYFASHFISNSWLMWFIISIVQMAPVSAMVRMYIFF
ASFYYIWKSYVHIMDGCTSSTCMMCYKRNRATRVECTTIVNGMKRSFYVYANGGRGFC
KTHNWNCLNCDTFCTGSTFISDEVARDLSLQFKRPINPTDQSSYIVDSVAVKNGALHL
YFDKAGQKTYERHPLSHFVNLDNLRANNTKGSLPINVIVFDGKSKCDESASKSASVYY
SQLMCQPILLLDQALVSDVDGSTEVSVKMF DAYVDTFSATFSVPMEKLKALVATAHSE
LAKGVALDGVLSTFVSAARQGVVD TDVDTKDVIECLKLSHSDLEVTGDSCNNFMLTY
NKVENMTPRDLGACIDCNARHINAQVAKSHNVSLIWNVKDYMSLSEQLRKQIRSAKK
NNIPFRLTCATTRQVNVITTKISLKG GKIVSTCFKLMLKATLLCVLAALVCYIVMPV
HTLSIHDGYTNEIIGYKAIQDGVTRDIISTDDCFANKHAGFDAWFSQRGGSYKNDKSC
PVVAAIITREIGFIVPGLPGTVLRAINGDFLHFLPRVFS AVGNICYTPSKLIEYS DFA
TSACVLAAECTIFKDAMGKVPYCYDTNLLEGSISYSELRPDTRYV LMDGSI IQFPNT
YLEGSRVVTTFDAEYCRHGT CERSEVGICLSTSGRWVLNNEHYRALSGVFCGV DAMN

FIGURE 33 (C)

LIANIFTPLVQPVGALDVSASVVAGGIIAILVTCAAYYFMKFRRVFGGEYNHVVAANAL
LFLMSFTILCLVPAYSFLPGVYSVFYLYLTFYFTNDVSFLAHLQWFAMFSPIVPFWIT
AIYVFCISLKHCHWFFNNYLKRVMFNGVTFSTFEEAALCTFLLNKEMYLKLRSETLL
PLTQYNRYLALYNKYKYFSGALDTSYREAACCHLAKALNDFSNSGADVLYQPPQTSI
TSAVLQSGFRKMAFSPSGKVEGCMVQVTCGTTTLNGLWLDDTVYCPRHVICTAEDMLNP
NYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQNCLLRLKVDTSNPKTPKYKFVRIQPGQ
TFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGSCGSVGFNIDYDCVSFCYMHMELP
TGVHAGTDLEGKFYGPVDRQTAQAAGTDTTITLNLAWLYAAVINGDRWFLNRFTTT
LNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDMCAALKELLQNGMNGRTILGS
TILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTFLTSLILVQSTQWSLFFF
VYENAFLPFTLGIMAIAACAMLLVKHKHAFCLCLLPSLATVAYFNMVYMPASWVMRI
MTWLELADTSLSGYRLKDCVMYASALVLLILMTARTVYDDAARRVWTLMNVITLVYKV
YYGNALDQAISMWALVISVTSNYSGVVTTIMFLARAIVFVCVEYYPLLFITGNTLQCI
MLVYCFLGYCCCCYFGLFCLLNRYFRLTLGVYDYLSTQEFMYMNSQGLLPKSSIDA
FKLNIKLLGIGGKPCIKVATVQSKMSDVKCTSVVLLSVLQQLRVESSKSLWAQCVQLH
NDILLAKDTTEAFEKMSVLLSVLLSMQGAVDINRLCEEMLDNRATLQAIASEFSSLPS
YAAAYATAQEAYEQAVANGDSEVVLKCLKKSLNVAKSEFDRDAAMQRKLEKMAQAMTQ
MYKQARSEDKRAKVTSAMQTMFTMLRKLNDALNNIINNARDGCVPLNIIPLTAAK
LMVVVPDYGTYNKTCDGNTFTYASALWEIQQVVDADSKIVQLSEINMDNSPNLAWPLI
VTALRANSVAVKLQNNELSPVALRQMSCAAGTTQTACTDDNALAYYNNKGGRFVLALL
SDHQDLKWARFPKSDGTGTIYTELEPPCRFVTDTPKGPKVKYLYFIKGLNNLNRGMVL
GSLAATVRLQAGNATEVPANSTVLSFCAFAVDPKAYKDYLASGGQPITNCVKMLCTH
TGTGQAITVTPEANMDQESFGGASCCLYCRCHIDHPNPKGFCDLKGKYVQIPTTCAND
PVGFTLRNTVCTVCGMWKGYGCSCDQLREPLMQSADASTFFKRVCGVSAARLTPCGTG
TSTDVVYRAFDIYNEKVAGFAKFLKTNCCRFQEKDEEGNLLDSYFVVKRHTMSNYQHE

FIGURE 33 (D)

ETIYNLVKDCPAVAVHDFFKFRVDGDMVPHISRQRLTKYTMADLVYALRHFDEGNCDT
LKEILVTYNCCDDDYFNKKDWYDFVENPDILRVYANLGERVRQSLLKTVQFCDAMRDA
GIVGVLTLDNQDLNGNWYDFGDFVQVAPGCGVPIVDSYYSLLMPILTTLTRALAAESHM
DADLAKPLIKWDLKDYDFTEERLCLFDRYFKYWDQTYHPNCINCLDDRCILHCANFNV
LFSTVFPPTSFGPLVRKIFVDGVFPFVSTGYHFRELGVVHNQDVNLHSSRLSFKELLV
YAADPAMHAASGNLLLDKRTTCFSVAALTNNVAFQTVKPGNFNKDFYDFAVSKGFFKE
GSSVELKHFFFAQDGNAAISDYDYRYNLPTMCDIRQLLFVVEVVDKYFDCYDGGCIN
ANQVIVNNLDKSAGFPFNKWGKARLYYDSMSYEDQDALFAYTKRNVIPITITQMNLYA
ISAKNRARTVAGVSI CSTMTRQFHQKLLKSIAATRGATTVIGTSKFYGGWHNMLKTV
YSDVETPHLMGWDYPKCDRAMPNMLRIMASLVLARKHNTCCNLSHRFYRLANCAQVL
SEMVMCGGSLYVKPGGTSSGDATTAYANSVFNICQAVTANVNALLSTDGINKIADKYVR
NLQHRLYECLYRNRDVEDHEFVDEFYAYLRKHFSMMILSDDAVVCYNSNYAAQGLVASI
KNFKAVLYYQNNVFMSEAKCWTETDLTKGPHEFCSQHTMLVKQGDDYVYLPYPDPSRI
LGAGCFVDDIVKTDGTLMIERFVSLAIDAYPLTKHPNQEYADV FHLYLQYIRKLHDEL
TGHMLDMYSVMLTNDNTSRYWEPEFYEAMYPHTVLQAVGACVLCNSQTSLRGACIR
RPFLCCKCCYDHVISTSHKLVL SVNYPVCNAPGCDVTDVTQLYLGMSYYCKSHKPPI
SFPLCANGQVFGLYKNTCVGSDNVTDFNAIATCDWTNAGDYILANTCTERLKLFAAET
LKATEETFKL SYGIATVREVLSDRELHLSWEVGKPRPPLNRNYVFTGYRVTKNSKVQI
GEYTFEKG DYGDAVVYRGTTTYKLNVDYFVLTSHTVMPLSAPTLVPQEHYVRITGLY
PTLNI SDEFSSNVANYQKVGMQKYSTLQGPPGTGKSHFAIGLALYPSARIVYTACSH
AAVDALCEKALKYLPIDKCSRIIPARARVECFDKFKVNSTLEQYVFCTVNALPETTAD
IVVFDEISMATNYDLSVVNARLRKHYVYIGDPAQLPAPRTLLTKGTLEPEYFNSVCR
LMKTIGPDMFLGTCRRCPAEIVDTV SALVYDNKLKAHKDKSAQCCKMFYKGVITHDVS
SAINRPQIGVVREFLTRNPAWRKAVFISPYN SQNAVASKILGLPTQTV DSSQGSEYDY
VIFTQTTETAHSCNVNRFNVAITRAKIGILCIMS DRDLYDKLQFTSLEIPRRNVATLQ

FIGURE 33 (E)

AENV TGLFKDCSKIITGLHPTQAPTHLSVDIKFKTEGLCVDIPGIPKDMTYRRLISMM
GFKMNYQVNGYPNMFITREEAIRHVRAWIGFDVEGCHATRDAVG TNLPLQLGFSTGVN
LVAVPTGYVDTENNT EFTRVNAKPPPGDQFKHLIPLMYKGLPWNVVR IKIVQMLSDTL
KGLSDRVV FVLWAHGFELTSMKYFVKIGPERTCCLCDKRATCFSTSSDTYACWNHSVG
FDYVYNPFMIDVQQWGFTGNLQSNHDQHCQVHGNAHVASCDAIMTRCLAVHECFVKRV
DWSVEYPIIGDEL RVNSACRKVQH MVVKSALLADKFPVLHDIGNPKAIKCV PQAEVEW
KFYDAQPCSDKAYKIEELFYSYATHHDKFTDGVCLFWNCNVD RYPANAIVCRFDTRVL
SNLNLPGCDGGS LYVNKHAFHTPAFDKSAFTNLKQLPFFYYSDSPCESHGKQVVS DID
YVPLKSATCITRCNLGGAVCRHHANEYRQYLDAYNMMISAGFSLWIYKQFD TYNLWNT
FTRLQSL ENVAYNVVNKGHFDGHAGEAPVSIINNAVYTKVDGIDVEIFENKTTLPVNV
AFELWAKRNIKPVPEIKILNNLGVDIAANTVIWDYKREAPAHVSTIGVCTMTDIAKKP
TESACSSLTVLFDGRVEGQVDLFRNARNGVLITEGSVKGLTPSKGPAQASVNGVTLIG
ESVKTQFNYFKKVDGIIQQLPETYFTQSRDLEDFKPRSQMETDFLELAMDEFIQRYKL
EGYAFEHIVYGDFSHGQLGGLHLMIGLAKRSQDSPLKLEDFIPMDSTVKNYFITDAQT
GSSKCVCSVIDLLLDDFVEI IKSQDLSVISKVVKVTIDYAEISFMLWCKDGHVETFYP
KLQASQAWQPGVAMPNLYKMQRMLLEKCDLQNYGENAVIPKGIMMNVAKYTQLCQYLN
TLTLAVPYNMRVIHFGAGSDKG VAPGTAVLRQWLPTGTLLVDSDLNDFVSDADSTLIG
DCATVHTANKWDLII SDMYDPRTKHVTKENDSKEGFFTYLCGFIKQKLALGGSIAVKI
TEHSWNADLYKLMGHFSWWTAFVTNVNASSSEAF LIGANYLGKPKEQIDGYTMHANYI
FWRNTNPIQLSSYS LFDMSKFPLKLRGTAVMSLKENQINDMIYSLLEKGR LIIRENNR
VVVSSDILVNN

FIGURE 34 (A)

RVCGVSAARLTPCGTGTSTDVVYRAFDIYNEKVAGFAKFLKTNC
CRFQEKDEEGNLLDSYFVVKRHTMSNYQHEETIYNLVKDCPAVAVHDFFKFRVDGDMV
PHISRQRLTKYTMADLVYALRHFDEGNCDTLKEILVTYNCCDDDYFNKKDWYDFVENP
DILRVYANLGERVRQSLLKTVQFCDAMRDAGIVGVLTLDNQDLNGNWDYDFGDFVQVAP
GCGVPIVDSYYSLLMPILTLTRALAAESHMDADLAKPLIKWDLKLYDFTEERLCLFDR
YFKYWDQTYHPNCINCLDDRCILHCANFNVLFFSTVFPPTSFGPLVRKIFVDGVFPFVVS
TGYHFRELGVVHNQDVNLHSSRLSFKELLVYAADPAMHAASGNLLLDKRTTCFSVAAL
TNNVAFQTVKPGNFNKFDFYDFAVSKGFFKEGSSVELKHFFFAQDGNAAISDYDYRYN
LPTMCDIRQLLFVVEVDKYFDCYDGGCINANQVI VNNLDKSAGFPFNKWKARLYYD
SMSYEDQDALFAYTKRNVIPTITQMNLYAISAKNRARTVAGVSI CSTMNRQFHQKL
LKSIAATRGATVVI GTSKFYGGWHNMLKTVYSDVETPHLMGWDYPKCDRAMPNMLRIM
ASLVLARKHNTCCNL SHRFYRLANECAQVLSEVMCGGSLYVKPGGTSSGDATTAYAN
SVFNICQAVTANVNALLSTDGNKIADKYVRNLQHRLYECLYRNRDVEHFVDEFYAYL
RKHFSMMILSDDAVVCYNSNYAAQGLVASIKNFKAVLYYQNNVFMSEAKCWTETDLTK
GPHEFCSQHTMLVKQGDDYVYLPYPDP SRILGAGCFVDDIVKTDGTLMIERFVSLAID
AYPLTKHPNQEYADV FHLYLQYIRKLHDEL TGHMLDMYSVMLTNDNTSRYWEPEFYEA
MYTPHTVLQAVGACVLCNSQTS LRCGACIRRPFLCCKCCYDHVISTSHKLVL SVNPYV
CNAPGCDVTDVTQLYLGGMSYYCKSHKPPISFPLCANGQVFGLYKNTCVGSDNVTDFN
AIATCDWTNAGDYILANTCTERLKLFAAETLKATEETF KLSYGIATVREVLSDRELHL
SWEVGKPRPPLNRNYVFTGYRVTKNSKVQIGEYTFEKG DYGDAVVYRGTTTYKLVGD
YFVLTSHTVMPLSAPTLVPQEHYVRITGLYPTLNISDEFSSNVANYQKVGMQKYSTLQ
GPPGTGKSHFAIGLALYYPSARIVYTACSHA AVDALCEKALKYLPIDKCSRIIPARAR
VECFDKFKVNSTLEQYVFCTVNALPETTADIVVFDEIS MATNYDLSVVNARLRKHYV
YIGDPAQLPAPRTLTKGTLEPEYFNSVCRLMKTIGPDMFLGTCRRCPAEIVDTV SAL
VYDNKLKAHKDKSAQC FKM FYKGVITHDVSSAINRPQIGVVREFLTRNPAWRKAVFIS
PYNSQNAVASKILGLPTQTV DSSQGSEYDYVIFTQT TETAHSCNVNRFNVAITRAKIG

FIGURE 34 (B)

ILCIMS DRDLYDKLQFTSLEIPRRNVATLQAENV TGLFKDCSKIITGLHPTQAPTHLS
VDIKFKTEGLCVDIPGIPKDMTYRRLISM MGFKMNYQVNGYPNMFITREEAIRHVRAW
IGFDVEGCHATRDAVG TNLPLQLGFSTGVNLVAVPTGYVD TENNTEFTRVNAKPPPGD
QFKHLIPLMYKGLPWNVVR IKIVQMLS DTLKGLSDRVV FVLWAHGFELTSMKYFVKIG
PERTCCLCDKRATCFSTSSD TYACWNH SVGFDYVYNPF MIDVQQWGFTGNLQSNHDQH
CQVHGNAHVASCD AIMTRCLAVHECFVKRVDWSVEYPIIGDEL RVNSACRKVQHMVVK
SALLADKFPVLHDIGNPKAIKCV PQAEVEWKFYDAQPCSDKAYKIEELFYSYATHHDK
FTDGVCLFWNCNVDRYPANAIVCRFDTRVLSNLNLPGCDGGS LYVNKHAFHTPAFDKS
AFTNLKQLPFFYYSDSPCESHGKQVVS DIDYVPLKSATCITRCNLGGAVCRHHANEYR
QYLDAYNMMISAGFSLWIYKQFDTYNLWNTFTRLQSL ENVAYNVVNKGHFDGHAGEAP
VSIINNAVYTKVDGIDVEIFENKTTLPVN VAFELWAKRNIKPVPEIKILNNLGVDIAA
NTVIWDYKREAPAHVSTIGVCTMTDIAKKPTESACSSLT VLF DGRVEGQVDLFRNARN
GVLITEGSVKGLTPSKGPAQASVNGVTLIGESVK TQFN YFKKVDGIIQQLPETYFTQS
RDLEDFKPRSQMETDFLELAMDEFIQRYKLEGYAF EHI VYGDFSHGQLGGLHLMIGLA
KRSQDSPLKLED FIPMDSTVKNYFITDAQTGSSKCVCSVIDLLLDDFVEI IKSQDLSV
ISKVVKVTIDYAEISFMLWCKDGHVETFY PKLQASQAWQPGVAMPNLYKMQRMLLEKC
DLQNYGENAVIPKGIMMNVAKYTQLCQYLN TLTLAVPYNMRVIHFGAGSDKG VAPGTA
VLRQWLPTGTLLVDS DLNDFVSDADSTLIGDCATVHTANKWDLIISDMYDPRTKHVTK
ENDSKEGFFTYLCGFIKQKLALGGSIAVKITEHSWNADLYKLMGHFSWWTAFVTNVNA
SSSEAF LIGANYLGKPKEQIDGYTMHANYIFWRNTNPIQLSSYS LFDMSKFPLKLRGT
AVMSLKENQINDMIYSLLEKGRLIIRENNRVVSSDILVNN

FIGURE 35 (A)

MESLVLGVNEKTHVQLSLPVLQVRDVLVRGFGDSVEEALSEARE
HLKNGTCGLVELEKGVLPQLEQPYVFIKRSDALSTNHGHKVVELVAEMDGIQYGRSGI
TLGVLVPHVGETPIAYRNVLLRKNGNKGAGGHSYGIDLKSYDLGDELGTDPIEDYEQN
WNTKHGSGALRELTRELNGGAVTRYVDNNFCGPDGYPLDCIKDFLARAGKSMCTLSEQ
LDYIESKRGVYCCRDHEHEIAWFTERSDKSYEHQTPFEIKSAKKFDTFKGECPKFVFP
LNSKVKVIQPRVEKKKTEGFMGRIRSVYPVASPQECNNMHLSTLMKCNHCDEVSWQTC
DFLKATCEHCGTENLVIEGPTTCGYLPTNAVVKMPCPACQDPEIGPEHSVADYHNHSN
IETRLRKGGRTRCFGGCVFAYVGCYNKRAYWVPRASADIGSGHTGITGDNVETLNEDL
LEILSRERNINIVGDFHLNEEVAILASFSASTSFAFIDTIKSLDYKSFKTIVESCNG
YKVTKGKPVKGAWNIGQQRSVLTPLCGFPSQAAGVIRSIFARTLDAANHSIPDLQRAA
VTILDGISEQSLRLVDAMVYTSDLLTNSVIIMAYVTGGLVQQTSQWLSNLLGTTVEKL
RPIFEWIEAKLSAGVEFLKDAWEILKFLITGVFDIVKGQIQVASDNIKDCVKCFIDVV
NKALEMCIDQVTIAGAKLRSLNLGEVFIAQSKGLYRQCIRGKEQLQLLMPLKAPKEVT
FLEGDSHDTVLTSEEVLKNGELEALETPVDSFTNGAIVGTPVCVNGLMLLEIKDKEQ
YCALSPGLLATNNVFRCLKGGAPIKGVTFGEDTVWEVQGYKNVRITFELDERVDKVLNE
KCSVYTVESGTEVTEFACVVAEAVVKTLPVSDLLTNMGIDLDEWSVATFYLFDDAGE
ENFSSRMYSFYPPDEEEEDDAECEEEEEIDETCEHEYGTEDDYQGLPLEFGASAETVR
VEEEEEEDWLDDTTEQSEIEPEPEPTPEEPVNQFTGYLKLTDNVAIKCVDIVKEAQSA
NPMVIVNAANIHLKHGGGVAGALNKATNGAMQKESDDYIKLNGPLTVGGSCLLSGHNL
AKKCLHVGPNNLAGEDIQLLKAAYENFNSQDILLAPLLSAGIFGAKPLQSLQVCVQT
VRTQVYIAVNDKALYEQVVM DYLDNLKPRVEAPKQEEPPNTEDSKTEEKSVVQKPVDV
KPKIKACIDEVTTTTLEETKFLTNKLLL FADINGKLYHDSQNMLRGEDMSFLEKDAPYM
VGDVITSGDITCVVIPSKKAGGTTEMLSRALKKVPVDEYITTYPGQGCAGYTL EEAKT
ALKKCKSAFYVLPSEAPNAKEEILGTVSWNLREMLAHAEETRKLMPICMDVRAIMATI
QRKYKGIKIQEGIVDYGVRFFFYTSKEPVASIIITKLNSLNEPLVTMPIGYVTHGFNLE
EAARCMRSLKAPAVVSVSSPDAVTTYNGYLTSSSKTSEEHFVETVSLAGSYRDWSYSG

FIGURE 35 (B)

QRTELGVEFLKRGDKIVYHTLESPVEFHLDGEVLSLDKLSLLSLREVKTIKVFTTVD
NTNLHTQLVDMSTYQQFGPTYLDGADVTKIKPHVNHEGKTFFVLPSDDTLRSEAFE
YYHTLDESFLGRYMSALNHTKKWKFPQVGGLTSIKWADNNCYLSSVLLALQQLEVKFN
APALQEAYYRARAGDAANFCALILAYSNKTVGELGDVRETMTHTLLQHANLESAKRVLN
VVCKHCGQKTTTLTGVEAVMYMGTLSDNLKTGVSI PCVCGRDATQYLVQQESSFVMM
SAPPAEYKLQQGTFLCANEYTGNYQCGHYTHITAKETLYRIDGAHLTKMSEYKGPVTD
VFYKETSYTTHIKPVSYKLDGVITYTEIEPKLDGYKKNAYYTEQPIDLVPQTQPLPNA
SFDNFKLTCSNTKFADDLNQMTGFTKPASRELSVTFFPDLNGDVVAIDYRHYSASFKK
GAKLLHKPIVWHINQATTKTTFKPNTWCLRCLWSTKPVDTSNSFEVLAVEDTQGMNLL
ACESQQPTSEEVVENPTIQKEVIECDVKTTEVVGNVILKPSDEGVKVTQELGHEDLMA
AYVENTSITIKKPNELSLALGLKTIATHGIAAINSVPWSKILAYVKPFLGQAAITTSN
CAKRLAQRVFNMYPYVFTLLFQLCTFTKSTNSRIRASLPTTIKNSVKSVAKLCLDA
GINYVKSPKFSKLFTIAMWLLLLSICLSGLDSDSYPALETIQVTISSYKLDLTILGLAAEWVL
NSSNVTTMDFCEGSFPCSI CLSGLDSDSYPALETIQVTISSYKLDLTILGLAAEWVL
AYMLFTKFFYLLGLSAIMQVFFGYFASHFISNSWLMWFIISIVQMAPVSAMVRMYIFF
ASFYYIWKSYPHIMDGCTSSCTMMCYKRNRATRVECTTIVNGMKRSFYVYANGGRGFC
KTHNWNCLNCDTFCTGSTFISDEVARDLSLQFKRPINPTDQSSYIVDSVAVKNGALHL
YFDKAGQKTYERHPLSHFVNLDNLRANNTKGSLPINVIVFDGKSKCDESASKSASVYY
SQLMCQPILLDDQALVSDVDGSTEVSVKMFDAYVDTFSATFSVPMEKLKALVATAHSE
LAKGVALDGVLSTFVSAARQGVVDTDVDTKDVECLKLSHSDLEVTGDSCNNFMLTY
NKVENMTPRDLGACIDCNARHINAQVAKSHNVSLIWNVKDYMSLSEQLRKQIRSAKK
NNIPFRLTCATTRQVNVITTKISLKGKIVSTCFKLMLKATLLCVLAALVCYIVMPV
HTLSIHDGYTNEIIGYKAIQDGVTRDIIISTDDCFANKHAGFDAWFSQRGGSYKNDKSC
PVVAAIITREIGFIVPGLPGTVLRAINDFLHFLPRVFSAVGNICYTPSKLIEYSDF
TSACVLAAECTIFKDAMGKVPYCYDTNLLEGSISYSELRPDTRYVLMGDSIIQFPNT
YLEGSRVVTTFDAEYCRHGTCEVSGICLSTSGRWVLNNEHYRALSGVFCGVDAMN

FIGURE 35 (C)

LIANIFTPLVQPVGALDVSASVVAGGIIAILVTCAAYYFMKFRRAFGEYNHVVAANAL
LFLMSFTILCLAPAYSFLPGVYSVFYLYLTFYFTNDVSFLAHLQWFAMFSPIVPFWIT
AIYVFCISLKHCHWFFNNYLKRVMFNGVTFSTFEEAALCTFLLNKEMYLKLRSETLL
PLTQYNRYLALYNKYKYFSGALDTTSYREAACCHLAKALNDFSNSGADVLYQPPQTSI
TSAVLQSGFRKMAFPPSGKVEGCMVQVTCGTTTLNGLWLDDTVYCPRHVICTAEDMLNP
NYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQNCLLRKVDTSNPKTPKYKFVRIQPGQ
TFSVLACYNGSPSGVYQCAMPNHTIKGSFLNGSCGSVGFNIDYDCVSFCYMHMELP
TGVHAGTDLEGKFYGPVDRQTAQAAGTDTTITLNLVLAWLAAVINGDRWFLNRFTTT
LNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDMCAALKELLQNGMNGRTILGS
TILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTFLTSLLLLVQSTQWSLFFF
VYENAFLPFTLGIMAIAACAMLLVKHKHAFCLFLLPSLATVAYFNMVYMPASWVMRI
MTWLELADTSLSGYRLKDCVMYASALVLLILMTARTVYDDAARRVWTLNMNITLVYKV
YYGNALDQAISMWALVISVTSNYSGVVTTIMFLARAIVFVCVEYYPLLFITGNTLQCI
MLVYCFLGYCCCCYFGLFCLLNRYFRLTLGVYDYLSTQEFYRMNSQGLLPKSSIDA
FKLNIKLLGIGGKPCIKVATVQSKMSDVKCTSVVLLSVLQQLRVESSSKLWAQCVQLH
NDILLAKDTTEAFEKMSVLLSVLLSMQGAVDINRLCEEMLDNRATLQAIASEFSSLPS
YAAAYATAQEAYEQAVANGDSEVVLKCLKKSLNVAKSEFDRDAAMQRKLEKMADQAMTQ
MYKQARSEDKRAKVTSAMQTMFLTMLRKLNDALNNIINNARDGCVPLNIIPLTAAK
LMVVVPDYGTYNKTCDGNTFTYASALWEIQQVVDADSKIVQLSEINMDNSPNLAWPLI
VTALRANSVAVKLQNNELSPVALRQMSCAAGTTQTACTDDNALAYYNNKGGRFVLALL
SDHQDLKWARFPKSDGTGTIYTELEPPCRFVTDTPKGPKVKYLYFIKGLNNLNRMVL
GSLAATVRLQAGNATEVPANSTVLSFCAFAVDPKAYKDYLASGGQPITNCVKMLCTH
TGTGQAITVTPEANMDQESFGGASCCLYCRCHIDHPNPKGFCDLKGKYVQIPTTCAND
PVGFTLRNTVCTVCGMWKGYGCSCDQLREPLMQSADASTFLNRVCGVSAARLTPCGTG
TSTDVVYRAFDIYNEKVAGFAKFLKTNCCRFQEKDEEGNLLDSYFVVKRHTMSNYQHE
ETIYNLVKDCPAVAVHDFFKFRVDGDMVPHISRQRLTKYTMADLVYALRHFDEGNCDT

FIGURE 35 (D)

LKEILVTYNCCDDDDYFNKKDWYDFVENPDILRVYANLGERVRQSLLKTVQFCDAMRDA
GIVGVLTLDNQDLNGNWDYDFGDFVQVAPGCGVPIVDSYYSLLMPILTLTRALAAESHM
DADLAKPLIKWDLKDYDFTEERLCLFDRYFKYWDQTYHPNCINCLDDRCILHCANFNV
LFSTVFPPTSFGPLVRKIFVDGVPPFVSTGYHFRELGVVHNQDVNLHSSRLSFKELLV
YAADPAMHAASGNLLLLDKRTTCFSVAALTNNVAFQTVKPGNFNKDFYDFAVSKGFFKE
GSSVELKHFFFAQDGNAAISDYDYRYNLPTMCDIRQLLFVVEVVDKYFDCYDGGCIN
ANQVIVNNLDKSAGFPFNKWGKARLYYDSMSYEDQDALFAYTKRNVIPITITQMNLYA
ISAKNRARTVAGVSICSTMTNRQFHQKLLKSIAATRGATVVIGTSKFYGGWHNMLKTV
YSDVETPHLMGWDYPKCDRAMPNMLRIMASLVLARKHNTCCNLSHRFYRLANECAQVL
SEMVMCGGSLYVKPGGTSSGDATTAYANSVFNICQAVTANVNALLSTDGINKIADKYVR
NLQHRLYECLYRNRDVEHEFVDEFYAYLRKHFSMMILSDDAVVCYNSNYAAQGLVASI
KNFKAVLYYQNNVFMSEAKCWTETDLTKGPHEFCSQHTMLVKQGDDYVYLPYPDPSRI
LGAGCFVDDIVKTDGTLMIERFVSLAIDAYPLTKHPNQEYADVHLYLQYIRKLHDEL
TGHMLDMYSVMLTNDNTSRYWEPEFYEAMYTPHTVLQAVGACVLCNSQTSLRGACIR
RPFLCCKCCYDHVISTSHKLVLSVNPYVCNAPGCDVTDVTQLYLGGMSYYCKSHKPP
SFPLCANGQVFGLYKNTCVGSDNVTDFNAIATCDWTNAGDYILANTCTERLKLFAAET
LKATEETFKLSYGIATVREVLSDRELHLSWEVGKPRPPLNRNYVFTGYRVTKNSKVQI
GEYTFEKGDYGDVAVYRGTTTYKLVNGDYFVLTSHTVMPLSAPTLVPQEHYVRITGLY
PTLNISDEFSSNVANYQKVGMQKYSTLQGPPGTGKSHFAIGLALYPSARIVYTACSH
AAVDALCEKALKYLPIDKCSRIIPARARVECFDKFKVNSTLEQYVFCTVNALPETTAD
IVVFDEISMATNYDLSVVNARLRKHYVYIGDPAQLPAPRTLLTKGTLEPEYFNSVCR
LMKTIGPDMFLGTCRRCPAEIVDTVSAVLDNKLKAHKEKSAQCFKMFYKGVITHDVS
SAINRPQIGVVREFLTRNPAWRKAVFISPYN SQNAVASKILGLPTQTVDSQSGSEYDY
VIFTQTTETAHSCNVNRFNVAITRAKIGILCIMS DRDLYDKLQFTSLEIPRRNVATLQ
AENV TGLFKDCSKIITGLHPTQAPTHLSVDIKFKTEGLCVDIPGIPKDMTYRRLISM
GFKMNYQVNGYPNMFITREEAIRHVRAWIGFDVEGCHATRDAVG TNLPLQLGFSTGVN

FIGURE 35 (E)

LVAVPTGYVDTENNTEFTRVNAKPPPGDQFKHLIPLMYKGLPWNVVR IKIVQMLSDTL
KGLSDRVVFLWAHGFELTSMKYFVKIGPERTCCLCDKRATCFSTSSDTYACWNHSVG
FDYVYNPFMIDVQQWGFTGNLQSNHDQHCQVHGNAHVASCDAIMTRCLAVHECFVKRV
DWSVEYPIIGDELRVNSACRKVQHMVVK SALLADKFPVLHDIGNPKAIKCV PQAEVEW
KFYDAQPCSDKAYKIEELFY SYATHHDKFTDGVCLFWNCNVDRYPANAIVCRFDTRVL
SNLNLPGCDGGS LYVNKHAFHTPAFDKSAFTNLKQLPFFYYSDSPCESHGKQVVS DID
YVPLKSATCITRCNLGGAVCRHHANEYRQYLDAYNMMISAGFSLWIYKQFDTYNLWNT
FTRLQSLENVAYNVVNKGHFDGHAGEAPVSIINNAVYTKVDGIDVEIFENKTTLPVNV
AFELWAKRNIKPVPEIKILNNLGVDIAANTVIWDYKREAPAHVSTIGVCTMTDIAKKP
TESACSSLTVLFDGRVEGQVDLFRNARNGVLITEGSVKGLTPSKGPAQASVNGVTLIG
ESVKTQFNYFKKVDGIIQQLPETYFTQSRDLEDFKPRSQMETDFLELAMDEFIQRYKL
EGYAFEHIVYGDFSHGQLGGLHLMIGLAKRSQDSPLKLEDFIPMDSTVKNYFITDAQT
GSSKCVCSVIDLLLDDFVEI IKSQDLSVISKVVKVTIDYAEISFMLWCKDGHVETFYP
KLQASQAWQPGVAMPNLYKMQRMLLEKCDLQNYGENAVIPKGIMMNVAKYTQLCQYLN
TLTLAVPYNMRVIHFGAGSDKG VAPGTAVLRQWLPTGTLLVDSDLNDFVSDADSTLIG
DCATVHTANKWDLIIISDMYDPR TKHVTKENDSKEGFFTYLCGFIKQKLALGGSIAVKI
TEHSWNADLYKLMGHFSWWTAFVTNVNASSSEAF LIGANYLGKPKEQIDGYTMHANYI
FWRNTNPIQLSSYS LFDMSKFPLKLRGTAVMSLKENQINDMIYSLLEKGR LIIRENNR
VVVSSDILVNN

FIGURE 36

KSFKTIVESC GNYKVTKGKPVKGAWNIGQQRSVLTPLCGFPSQA
AGVIRSIFARTLDAANHSIPDLQRAAVTILDGISEQSLRLVDAMVYTSDLLTNSVIIM
AYVTGGLVQQTSQWLSNLLGTTVEKLRPIFEWIEAKLSAGVEFLKDAWEILKFLITGV
FDIVKGQIQVASDNIKDCVKCFIDVVKALEMCIDQVTIAGAKLRSLNLGEVFIAQSK
GLYRQCIRGKEQLQLLMPLKAPKEVTFLEGDSHDTVLTSEEVVLKNGELEALETPVDS
FTNGAIVGTPVCVNGLMLEIKDKEQYCALSPGLLATNNVFRLLKGGAPIKGVTFGEDT
VWEVQGYKNVRITFELDERVDKVLNEKCSVYTVESGTEVTEFACVVAEAVVKTLQPVS
DLLTNMGIDLDEWSVATFYLFDDAGEENFSSRMYCSFYPPDEEEEDDAECEEEIDET
CEHEYGTEDDYQGLPLEFGASAETVRVEEEEEEDWLDDTTEQSEIEPEPEPTPEEPVN
QFTGYLKLTDNVAIKCVDTVKEAQSANPMVIVNAANIHLKHGGGVAGALNKATNGAMQ
KESDDYIKLNGPLTVGGSCLLSGHNLAKKCLHVVGPNLNAGEDIQLLKAAYENFNSQD
ILLAPLLSAGIFGAKPLQSLQVCVQTVRTQVYIAVNDKALYEQVVM DYLDNLKPRVEA
PKQEEPPNTEDSKTEEKSVVQKPV DVKPKIKACIDEVTTTLEETKFLTNKLLLFADIN
GKLYHDSQNMLRGEDMSFLEEDAPYMGDVITSGDITCVVIPSKKAGGTTEMLSRALK
KVPVDEYITTPGQGCAGYTL EEAKTALKKCKSAFYVLPSEAPNAKEEILGT VSWNLR
EMLAHAE EARKLMPICMDVRAIMATIQRKYKG VKIQEGIVDYGV RFFFYTSKEPVASI
ITKLNSLNEPLVTMPIGYVTHGFNLEEAARCMRSLKAPAVSVSSPDAVTTYNGYLTS
SSKTSEEHFVETVSLAGSYRDWSYSGQRT ELGVEFLKRGDKIVYHTLES PVEFHLDGE
VLSLDKLSLLSLREVKT IKVFTTVDNTNLHTQLVDMSMTYGQQFGPTYLDGADVTKI
KPHVNHEGKTFFVLPSDDTLRSEAF EYYHTLDESFLGRYMSALNHTKKWKFPQVGGLT
SIKWADNNCYLSSVLLALQQLEVKFNAPALQE

FIGURE 37

KSFKTIVESC GNYKVTKGKPVKGAWNIGQQRSVLTPLCGFPSQA
AGVIRSIFARTLDAANHSIPDLQRAAVTILDGISEQSLRLVDAMVYTSDLLTNSVIIM
AYVTGGLVQQTSQWLSNLLGTTVEKLRPIFEWIEAKLSAGVEFLKDAWEILKFLITGV
FDIVKGQIQVASDNIKDCVKCFIDVFNKALEMCIDQVTIAGAKLRSLNLGEVFIAQSK
GLYRQCIRGKEQLQLLMPLKAPKEVTFLEGDSHDTVLTSEEVVLKNGELEALETPVDS
FTNGAIVGTPVCVNGLMLEIKDKEQYCALSPGLLATNNVFRLLKGGAPIKGVTFGEDT
VWEVQGYKNVRITFELDERVDKVLNEKCSVYTVESGTEVTEFACVVAEAVVKTLQPV
DLLTNMGIDLDEWSVATFYLFDDAGEENFSSRMYCSFYPPDEEEEDDAECEEEIDET
CEHEYGTEDDYQGLPLEFGASAETVRVEEEEEEDWLDDTTEQSEIEPEPEPTPEEPVN
QFTGYLKLTDNVAIKCVDTVKEAQSANPMVIVNAANIHLKHGGGVAGALNKATNGAMQ
KESDDYIKLNGPLTVGGSCLLSGHNLAKKCLHVVGPNLNAGEDIQLLKAAYENFNSQD
ILLAPLLSAGIFGAKPLQSLQVCVQTVRTQVYIAVNDKALYEQVMDYLDNLKPRVEA
PKQEEPNTEDSKTEEKSVVQKPVDPKPKIKACIDEVTTTLEETKFLTNKLLLFADIN
GKLYHDSQNMLRGEDMSFLEEDAPYMGDVITSGDITCVVIPSCKAGGTTEMLSRALK
KVPVDEYITTPGQGCAGYTLLEAKTALKKCKSAFYVLPSEAPNAKEEILGTVSWNLR
EMLAHAE EARKLMPICMDVRAIMATIQRKYKGVKIQEGIVDYGVRRFFFYTSKEPVASI
ITKLNSLNEPLVTMPIGYVTHGFNLEEAARCMRSLKAPAVSVSSPDAVTTYNGYLTS
SSKTSEEHFVETVSLAGSYRDWSYSGQRTLGVEFLKRGDKIVYHTLES PVEFHLDGE
VLSLDKLSLLSLREVKTIKVFTTVDNTNLHTQLVDMSMTYGQQFGPTYLDGADVTKI
KPHVNHEGKTFFVLPSDDTLRSEAFEYYHTLDESFLGRYMSALNHTKKWKFPQVGGLT
SIKWADNNCYLSSVLLALQQLEVKNAPALQE

FIGURE 38

MESLVLGVNEKTHVQLSLPVLQVRDVLVRGFGDSVEEALSEARE
HLKNGTCGLVELEKGVLPQLEQPYVFIKRSDALSTNHGHKVVELVAEMDGIQYGRSGI
TLGVLVPHVGETPIAYRNVLLRKNGNKGAGGHSYGIDLKSYDLGDELGTDPIEDYEQN
WNTKHGSGALRELTRELNGGVVTRYVDNNFCGPDGYPLDCIKDFLARAGKSMCTLSEQ
LDYIESKRGVYCCRDHEHEIAWFTERSDKSCEHQTPFEIKSAKKFDTFKGECPKFVFP
LNSKVKVIQPRVEKKKTEGFMGRIRSVYPVASPQECNNMHLSTLMKCNHCDEVSWQTC
DFLKATCEHCGTENLVIEGPTTCGYLPTNAVVKMPCPACQDPEIGPEHSVADYHNHSN
IETRLRKGGRTRCFGGCVFAYVGCYNKRAYWVPRASADIGSGHTGITGDNVETLNEDL
LEILSRERNINIVGDFHLNEEVAILASFSASTSAFIDTIKSLDYKSFKTIVESC

FIGURE 39

MESLVLGVNEKTHVQLSLPVLQVRDVLVRGFGDSVEEALSEARE
HLKNGTCGLVELEKGVLPQLEQPYVFIKRSDALSTNHGHKVVELVAEMDGIQYGRSGI
TLGVLVPHVGETPIAYRNVLLRKNGNKGAGGHSYGIDLKSYDLGDELGTDPIEDYEQN
WNTKHGSGALRELTRELNGGVVTRYVDNNFCGPDGYPLDCIKDFLARAGKSMCTLSEQ
LDYIESKRGVYCCRDHEHEIAWFTERSDKSCEHQTPFEIKSAKKFDTFKGECPKFVFP
LNSKVKVIQPRVEKKKTEGFMGRIRSVYPVASPQECNNMHLSTLMKCNHCDEVSWQTC
DFLKATCEHCGTENLVIEGPTTCGYLPTNAVVKMPCPACQDPEIGPEHSVADYHNHSN
IETRLRKGGRTRCFGGCVFAYVGCYNKRAYWVPRASADIGSGHTGITGDNVETLNEDL
LEILSRERVNINIVGDFHLNEEVAILASFSASTSAFIDTIKSLDYKSFKTIVESC

FIGURE 40

MSDNGPQSNQRSAPRITFGGPTDSTDNNQNGGRNGARPKQRRPQ
GLPNNTASWFTALTQHGKEELRFPRGQGVPIINTNSGPDDQIGYYRRATRVRGGDGKM
KELSPRWYFYLLGTGPEASLPYGANKEGIVWVATEGALNTPKDHIGTRNPNNNAATVL
QLPQGTTLPGFYAEGSRGGSQASSRSSSRSGNSRNSTPGSSRGNSPARMASGGGET
ALALLLLDRLNQLESKVSGKGQQQQGQTVTKKSAAEASKKPRQKRTATKQYNVTQAFG
RRGPEQTQGNFGDQDLIRQGTDYKHWPQIAQFAPSASAFFGMSRIGMEVTPSGTWLTY
HGAIKLDDKDPQFKDNVILLNKHIDAYKTFPPTEPKDKKKKTDEAQPLPQRQKKQPT
VTLLPAADMDDFSRQLQNSMSGASADSTQA

FIGURE 41

MFIFLLFLTLTSGSDLDRCTTFDDVQAPNYTQHTSSMRGVYYPD
EIFRSDTLYLTQDLFLPFYSNVTGFHTINHTFDNPVIPFKDGIYFAATEKSNVVRGWV
FGSTMNNKSQSVIIINNSTNVVIRACNFELCDNPFFAVSKPMGTQHTMIFDNAFNCT
FEYISDAFSLDVSEKSGNFKHLREFVFKNKDGFLYVYKGYQPIDVVRDLPSGFNTLKP
IFKLPLGINITNFRAILTAFSPAQDTWGTSAAYFVGYLKPTTFMLKYDENGITIDAV
DCSQNPLAELKCSVKSFEIDKGIYQTSNFRVVPSPGDVVRFPNITNLCPFGEVFNATKF
PSVYAWERKKISNCVADYSVLYNSTFFSTFKCYGVSATKLNDLCFSNVYADSFVVKGD
DVRQIAPGQTGVIADYNYKLPDDFMGCVLAWNTRNIDATSTGNYNKYRYLRHGKLRP
FERDISNVPPSPDGKPCTPPALNCYWPLNDYGFTTTGIGYQPYRVVLSFELLNAPA
TVCGPKLSTDLIKNQCVNFNFNGLTGTGVLTTPSSKRFQPFQQFGRDVSDFDTSVRDPK
TSEILDISPSCSFGGVSVITPGTNASSEVAVLYQDVNCTDVSTAIHADQLTPAWRIYST
GNNVFQTQAGCLIGAHEVDTSYECDIPIGAGICASYHTVSLLRSTSQKSIVAYTMSLG
ADSSIAYSNNTIAIPTNFSISITTEVMPVSMAKTSVDCNMYICGDSTECANLLLQYGS
FCTQLNRALSGIAAEQDRNTREVFAQVKQMYKTPTLKYFGGFNFSQILPDPLKPTKRS
FIEDLLFNKVTLADAGFMKQYGECLGDINARDLICAQKFNGLTVLPPLLTDDMIAAYT
AALVSGTATAGWTFGAGAALQIPFAMQMAYRFNGIGVTQNVLYENQKQIANQFNKAIS
QIQESLTTTSTALGKLQDVVNQNAQALNTLVKQLSSNFGAISSVLNDILSRLDKVEAE
VQIDRLITGRLQSLQTYVTQQLIRAAEIRASANLAATKMSECVLGQSKRVDFCGKGYH
LMSFPQAAPHGVVFLHVTYVPSQERNFTTAPAIHEGKAYFPREGVVFVNGTSWFITQ
RNFFSPQIIITDNTFVSGNCDVVIGIINNTVYDPLQPELDSFKEELDKYFKNHTSPDV
DLGDISGINASVVNIQKEIDRLNEVAKNLNESLIDLQELGKYEQYIKWPWYVWLGFIGA
GLIAIVMVTILLCCMTSCCSCLKGACSCGSCCKFDEDDSEPVLKGVKLHYT